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Water Resources Data for New York
Water Year 1980. Volume 3. Western New York

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Albany, NY

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March 3, 1849

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Volume 3. Western New York

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-80-3

WATER YEAR 1980

Prepared in cooperation with the State of
New York and with other agencies

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UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Doyle G. Frederick, Acting Director

For information on the water program in New York write to
District Chief, Water Resources Division
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Albany, New York 12201
1981

PREFACE

This report was prepared by personnel of the New York district of the Water Resources Division of the U.S. Geological Survey under the supervision of L. A. Martens, District Chief, and J. E. Biesecker, Regional Hydrologist, Northeastern Region. It was done in cooperation with the State of New York and with other agencies.

This report is one of a series issued by State boundary. General direction for the series is by Philip Cohen, Chief Hydrologist, U.S. Geological Survey, and R. J. Dingman, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for New York are in three volumes as follows:

Volume 1. Eastern New York excluding Long Island
Volume 2. Long Island
Volume 3. Western New York

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Water resources data for the 1980 water year for New York consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 83 gaging stations; stage only at 14 gaging stations; stage and contents at 6 gaging stations and 2 other lakes and reservoirs; water quality at 19 gaging stations; 5 quality of precipitation stations; and water levels at 19 observation wells. Also included are data for 52 crest-stage and 16 low-flow partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volume 1 and 2 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

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WATER RESOURCES DATA FOR NEW YORK, 1980
Volume 3.--Western New York

INTRODUCTION

Water resources data for the 1980 water year for New York consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; quality of precipitation; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 83 gaging stations; stage only at 14 gaging stations; stage and contents at 6 gaging stations and 2 other lakes and reservoirs; water quality at 19 gaging stations, 5 quality of precipitation stations; and water levels at 19 observation wells. Locations of these sites are shown on figure 4. Also included are data for 52 crest-stage and 16 low-flow partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volumes 1 and 2 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NY-80-3." These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (518) 472-3107.

COOPERATION

The U.S. Geological Survey and organizations of the State of New York and other agencies have had cooperative agreements for the systematic collection of water records since 1900. Organizations that assisted in collecting data included in Volume 3, water year 1980, through cooperative agreement with the Survey are:

New York State Department of Environmental Conservation
New York State Department of Transportation
New York State Education Department
County of Chautauqua, Planning Department
County of Cortland, Planning Department
County of Monroe, Department of Health
County of Monroe, Water Authority
County of Onondaga, Department of Public Works
County of Onondaga, Water Authority Commission
City of Auburn
City of Rochester, Water Bureau
Irondequoit Bay Pure Waters District

Assistance in the form of funds for collecting records at gaging stations published in this report was also given by the U.S. Army Corps of Engineers, the Soil Conservation Service, the Environmental Protection Agency, and the Susquehanna River Basin Commission.

The following organizations aided in collecting records:

Municipalities of Batavia, Canandaigua, Cortland, Jamestown, Lancaster, Oneida Rochester, Syracuse; Cornell University; New York State Electric and Gas Corp.; Niagara Mohawk Power Corp.; Rochester Gas and Electric Corp.

Organizations that supplied data are acknowledged in station descriptions.

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SIGNIFICANT HYDROLOGIC EVENTS

The 1980 water year was characterized by hydrologic extremes, ranging from record floods to record low monthly discharges. Most streams had normal seasonal fluctuations except during December through February 1980 (figs. 2 and 3), when trends declined. Annual precipitation and runoff were near or slightly below average in most parts of upstate New York.

Rainfall was slightly above average in October and November and produced above-average runoff through December in most of upstate New York. From December through February, monthly precipitation was significantly below normal, and runoff decreased to record or near-record lows for Feburary. Below-normal temperatures in February caused substantial ice buildups in many streams.

In March, precipitation was above normal and caused a corresponding increase in runoff. Heavy rains on March 21 and 22 produced flooding in eastern and southeastern New York; storm totals of 4 to 5 inches were common in the eastern Catskill Mountains.

During May, precipitation throughout the State ranged generally from one-third to one-half the normal amount. During the remainder of the year, precipitation and runoff fluctuated widely. Summer runoff was generally above normal in the western and northern part of the State and below normal in the eastern and southeastern part.

An intense thunderstorm on November 26, 1979, in Essex County caused flooding and property damage along The Branch, a tributary to the Bouquet River near Elizabethtown. The flood claimed five lives. On March 21 and 22, general flooding in the Catskill Mountain region occurred in Esopus Creek, Neversink River, Schoharie Creek, and Catskill Creek basins. At the Esopus Creek gaging station at Cold Brook, this storm producted the highest discharge since installation of the gage in 1914. At most other long-term stations on streams draining the northern and eastern slopes of the Catskill Mountains, the flows of March 21 and 22 were highest in 25 years. In late June in western New York, thundershowers producted as much as 3.5 inches of rain in half an hour and caused extensive damage in the Albion and Buffalo areas.

By the end of the water year, storage in some water-supply reservoirs in the lower Hudson River and Delaware River basins had become alarmingly low, partly as a result of below-normal rainfall during May, July, August, and September.

Ground-water levels were above average throughout eastern New York and generally normal in western New York during the beginning of the water year (October-November), but, by December, levels had declined to below normal in eastern New York in response to below-average precipitation. Precipitation remained below normal through February, particularly in the eastern and southeastern parts of the State; consequently, water-table altitudes were below average when recharge ceased in the spring as the growing season started.

Summer water-level declines were accentuated in eastern and central New York. Many wells had their lowest September water levels in at least 10 years, and two wells in central New York in September had the lowest recorded levels in 25 years. The general decline in water levels during the 1980 water year continues a downward trend that has prevailed in recent years in all areas except southwestern New York.

Water-quality and discharge data from the 13 NASQAN stations and 1 Benchmark station in upstate New York indicated no significant changes in chemical quality from previous years. Extremes included a high total chromium concentration of 50 μg/L from the Genesee River at Charlotte Docks at Rochester on September 5, 1980, and a low specific conductance of 125 μmho/cm from Sandy Creek at Adams in north-central New York on March 18, 1980. The chromium concentration equals the National Interim Primary Drinking-Water Standard. The Sandy Creek specific conductance was the lowest of record (water years 1965, 1978-80) for samples collected for chemical analyses. Low conductance is generally associated with high discharge, but the relatively large discharge of 1,420 ft^3/s on March 18, 1980, was considerably below extremes recorded previously during sampling at that site.

Monitoring of polychlorinated biphenyl (PCB) concentrations in the Hudson River, begun in 1976, was continued; no measurable change in contamination of the river was observed. A model based on earlier data predicts an inverse relationship between PCB concentration and discharge except at flow extremes. This relationship was confirmed by data collected this year. At peak discharge, high PCB concentrations may result when river turbulence is sufficient to resuspend significant quantities of contaminated bottom material. Flow was high during parts of November 1979 and March and April 1980. However, PCB concentrations were lower during the March high flow than during November and April because most of the water in March was derived from the lower, uncontaminated part of the Hudson, whereas that during November and April was from the upper, more contaminated part of the river. Nevertheless, flows during the spring snowmelt of 1980 were considerably lower than those of 1977 and 1979, and the highest PCB concentrations in 1980 were also comparatively low.

A sustained period of low flows, the first since PCB monitoring began, occurred during the summer and early fall of 1980. Results indicate that the inverse relationship between PCB concentration and discharge does not prevail at very low flows. At discharges below about 2,000 ft^3/s at Waterford (and below comparable flows at the other stations), PCB concentration no longer continues to increase as discharge decrease.

Operation of the precipitation-monitoring network, which was temporarily interrupted in 1979, was resumed this water year. Samples collected during the 1979 water year and stored under refrigeration were analyzed this year. Results confirm trends in chemical composition of precipitation that have been noted since inception of the network in 1964--namely an increase in nitrate, a decrease in sulfate, and little or no change in pH on a Statewide basis.

Data on nutrient transport in Switzer Creek in Steuben County indicate that approximately 85 percent of nitrogen transported during base flow is in the form of nitrate plus nitrite. During storms, however, most of the nitrogen transported is in the form of organic nitrogen, which likely reflects its attachments to suspended sediment. On a annual basis, 90 percent of the phosphorus was transported during storms and only 10 precent during base flow. This distribution results from the strong affinity of phosphate for particulate material, which increases in concentration during storms.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound system units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on KF medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material See Bottom material.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Biomass pigment ratio is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

Bottom material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material".

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceos organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Colloid is any substance with particles in such a fine state of subdivision dispersed in a medium, for example water, that they do not settle out; but not in so fine a state of subdivision that they can be said to be truly dissolved.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/S, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (μg/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L, μg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organic carbon (OC) is a measure of the organic matter present in aqueous solution and (or) suspension. May be reported in any of three categories (DOC, dissolved organic carbon; SOC, suspended organic carbon; TOC, total organic carbon).

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in distilled water (chemically dispersed).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or Sieve
Gravel........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. The sample is subjected to mechanical and chemical dispersion in distilled water before analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

Periphyton is the assemblage of algae, fungi, and bacteria which are attached to or live upon submerged objects in lakes and rivers.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth (1 x 10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7 x 10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Euglenoids (Euglenophyta) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark.

Fire algae (Pyrrhophyta) are free-swimming unicells characterized by a red spot.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated napthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated napthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/(m^2.time) for periphyton and macrophytes and mg C/(m^3.time)] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O_2/(m^2.time) for periphyton and macrophytes and mg O_2/(m^3.time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lived.

Natural substrates refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total".

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexageria
Species	Hexagenia limbata

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Total (as used in tables of chemical analyses):

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total". (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBERS

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station, partial-record station, and miscellaneous site has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations, miscellaneous sites, and other stations; therefore, the station number for a partial-record station or a miscellaneous site indicates downstream-order position in a list made up of all types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 01502500 includes the 2-digit part number "01" plus the 6-digit downstream order number "502500". In a few instances where no gaps were left in the 8-digit numbering sequence, one or two digits were added (making a 9- or 10-digit station number) and (or) a latitude-longitude number was used for identification.

NUMBERING SYSTEM FOR WELLS

The 8-digit downstream order station numbers are not assigned to wells. The well-numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells within a 1-second grid. See figure 1 below.

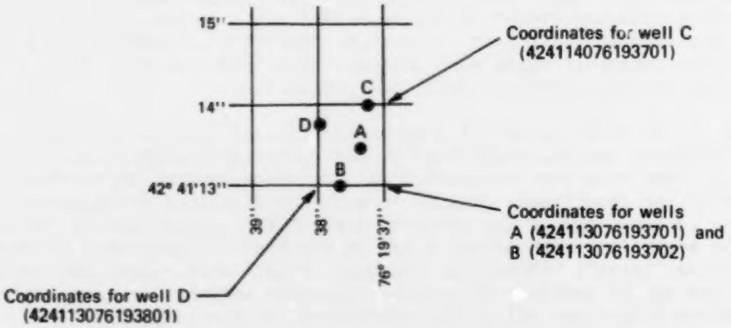


Figure 1. System for numbering wells (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consulation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and computing the discharge in the usual manner yield incorrect results. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The daily contents are computed from gage heights and capacity tables, then the daily, monthly, and yearly change of contents are computed from the daily figures.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage for some stations, given under "LOCATION", is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a "REVISED RECORDS" paragraph has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in the section, "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with "EXTREMES FOR THE CURRENT YEAR"; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The table of daily discharge for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the table, the "TOTAL" line gives the sum of the daily figures. The "MEAN" line gives the average flow in cubic feet per second during the month. The "MAX" and "MIN" lines give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile ("CFSM" line), or in inches ("IN." line). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of Field Data and Computed Results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good," within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Data Available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

EXPLANATION OF WATER-QUALITY RECORDS

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the location of the water quality sampling site differs significantly from that of the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites. Data for precipitation-quality stations appear next. The table of ground-water quality data follows the ground-water level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number.

Descriptive Headings

For continuing record stations, data are preceded by information pertinent to the history of station operation. These descriptive headings give details regarding locations, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Headings for precipitation-quality records include location information and a description of the sample collector.

Categories of Water-Quality Data

There is a broad range of water-quality parameters available for most stations whose record exceeds more than a few years operation. Sampling schedules are often intermittant for certain types of data, with analyses available for some but not all years within a stations's period of record. An acurate description of the variety of data available is shown by grouping similar parameters into a few general categories, which are listed in the "PERIOD OF RECORD" paragraph. Each category of data is followed by a notation of the water year(s) for which data is available and a letter code describing the frequency of sampling (see following section, "Frequency-of-Sampling Notation").

The "PERIOD OF RECORD" paragraph lists the following categories of data to describe information available.

CHEMICAL DATA: Usually includes most of the "major ions", and may often include some of the following physical properties: specific conductance, pH, temperature, color, turbidity, dissolved oxygen.

MINOR ELEMENT DATA: Comprises the "heavy metals" and some of the "alkaline earth" groups. Determinations usually include some but not all of the following: Al, As, Ba, Cd, Cr, Co, Cu, Hg, Li, Ni, Pb, Se, Sn, Sr, Zn.

RADIOCHEMICAL DATA: The determinations of the concentration of individual radioactive elements, such as radium 226, cobalt 60, strontium 90, and tritium. This category also inclu des the gross mesurement of radioactivity (alpha, beta, gamma) without regard to the radiochemical species that produce the radioactivity.

PESTICIDE DATA: The organic compounds (insecticides and herbicides) used to control insects and plants. Routinely, the analyses searches for traces of between 12 to 22 compounds.

ORGANIC DATA: Organic data (other than pesticides) such as OC, PCB, PCN.

NUTRIENT DATA: Constituents containing nitrogen or phosphorus. Results usually include several of the following: nitrite plus nitrate, phosphorus, ammonia nitrogen, organic nitrogen, ammonia nitrogen plus organic nitrogen (Kjeldahl nitrogen).

BIOLOGICAL DATA: The identification and concentration of microscopic plant organisms (phytoplankton, periphyton), or enteric bacteria (total coliform, fecal coliform, or fecal streptococcal) living in aquatic habitats.

SEDIMENT DATA: Suspended-sediment concentration, suspended-sediment discharge, and particle-size data for discrete samples.

Frequency-of-Sampling Notation

The categories of data given in the "PERIOD OF RECORD" paragraph are followed by the water year(s) for which that kind of data was collected. The amount of data available is specified by the following letter codes:

(a) 1 or 2 samples per year.
(b) 3 to 5 samples per year.
(c) 6 to 9 samples per year.
(d) 10 to 20 samples per year.
(e) more than 20 samples per year.

Thus, CHEMICAL DATA: 1972-74(c), 1977-80(a).", shows there are at least six analyses each year for the first three years of record, no data for this category in 1975 and 1976, and 1 or 2 samples for each of the four most recent years.

Water Analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on page 22.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Terminology used in reporting chemical constituents is an indication of whether all or only part of a constituent associated with the solids in a water-quality sample is determined by a chemical analysis. (See preceding section, "Definition of Terms.") The "recoverable" in the terms "Suspended, recoverable", "Total, recoverable", and "Recoverable from bottom material" indicates that the constituent was digested by a method that results in the dissolution of only readily soluble substances. Thus, the determination may not represent all of the constituent actually present in the sample. The "total" in the terms "Total", "Suspended, total", and "Total in bottom material" is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water Temperatures

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures and/or maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of Data

Ground-water level data consist of water-level measurements made in observation wells. Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 1.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well; National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is based. If known, the altitude of the land-surface datum above National Geodetic Vertical Datum of 1929 is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported as mean daily values, then monthly and yearly means are computed from the daily figures. Water levels in wells not equipped with recording gages are measured periodically, usually weekly, with a weighted tape.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975 65 p.
1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6, 1968. 13 pages.
3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8, 1969. 65 pages.
3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2 1976. 172 pages.
3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2, 1970. 59 pages.
3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972, 18 pages.
4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite-difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion of ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

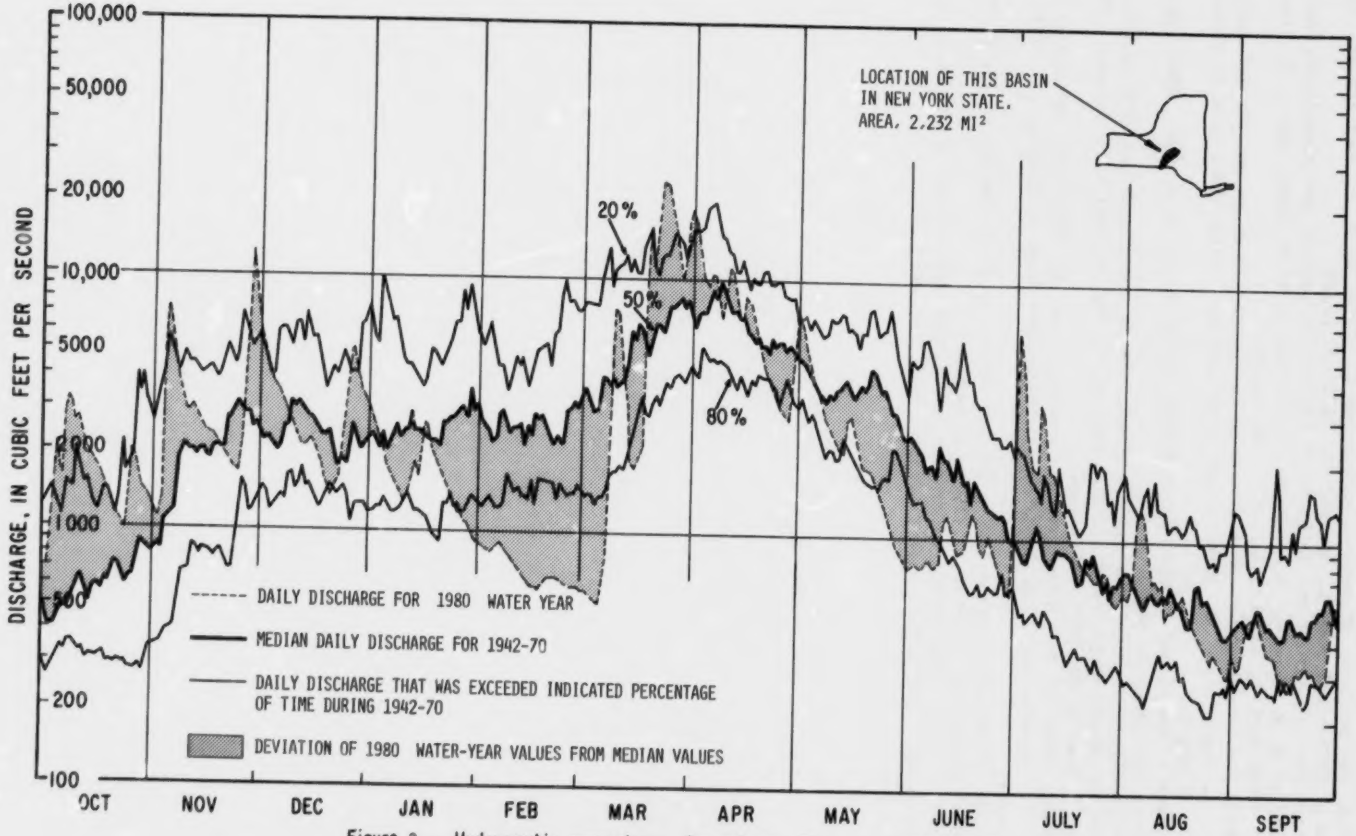


Figure 2.-- Hydrographic comparisons, Susquehanna River at Conklin, N Y

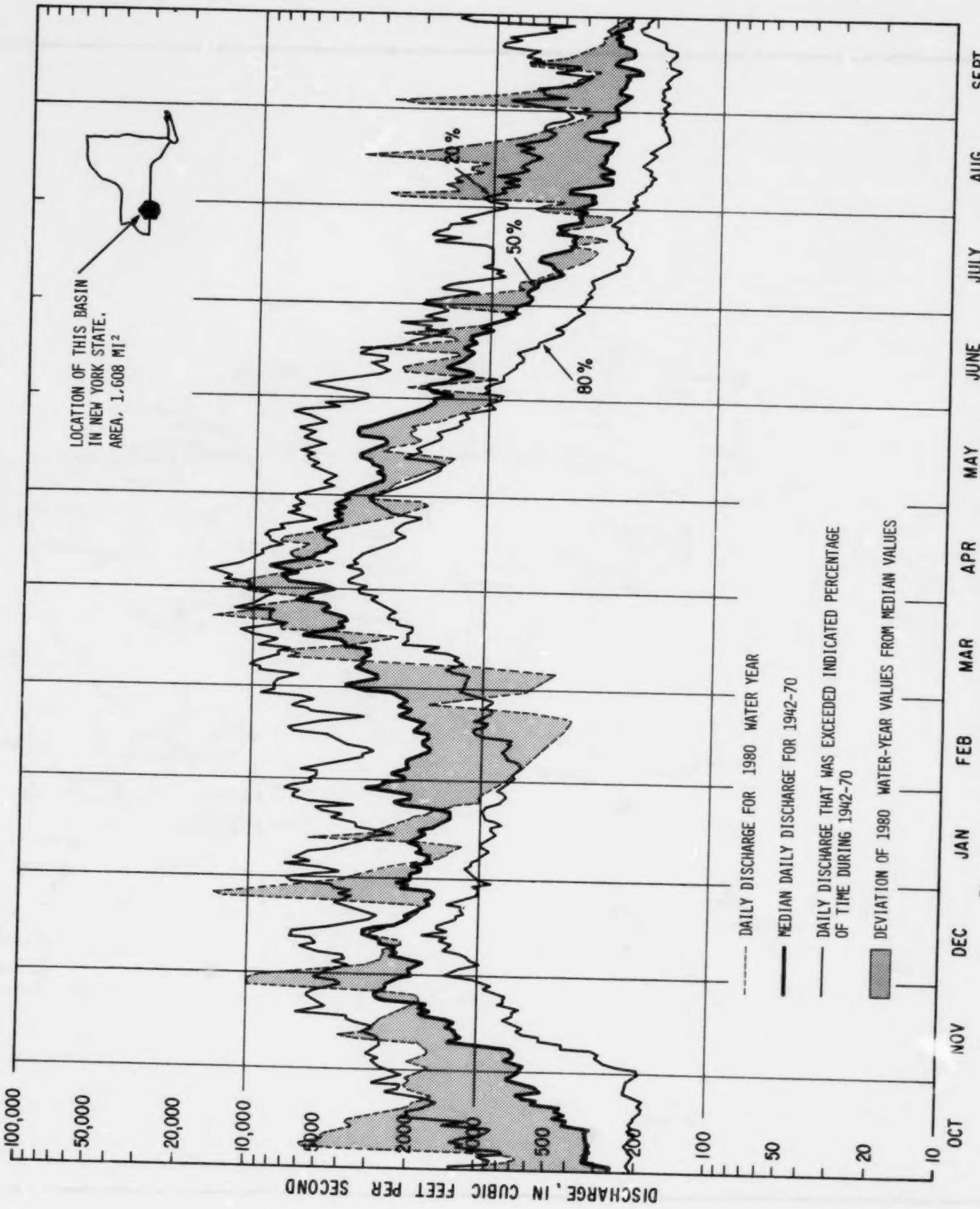
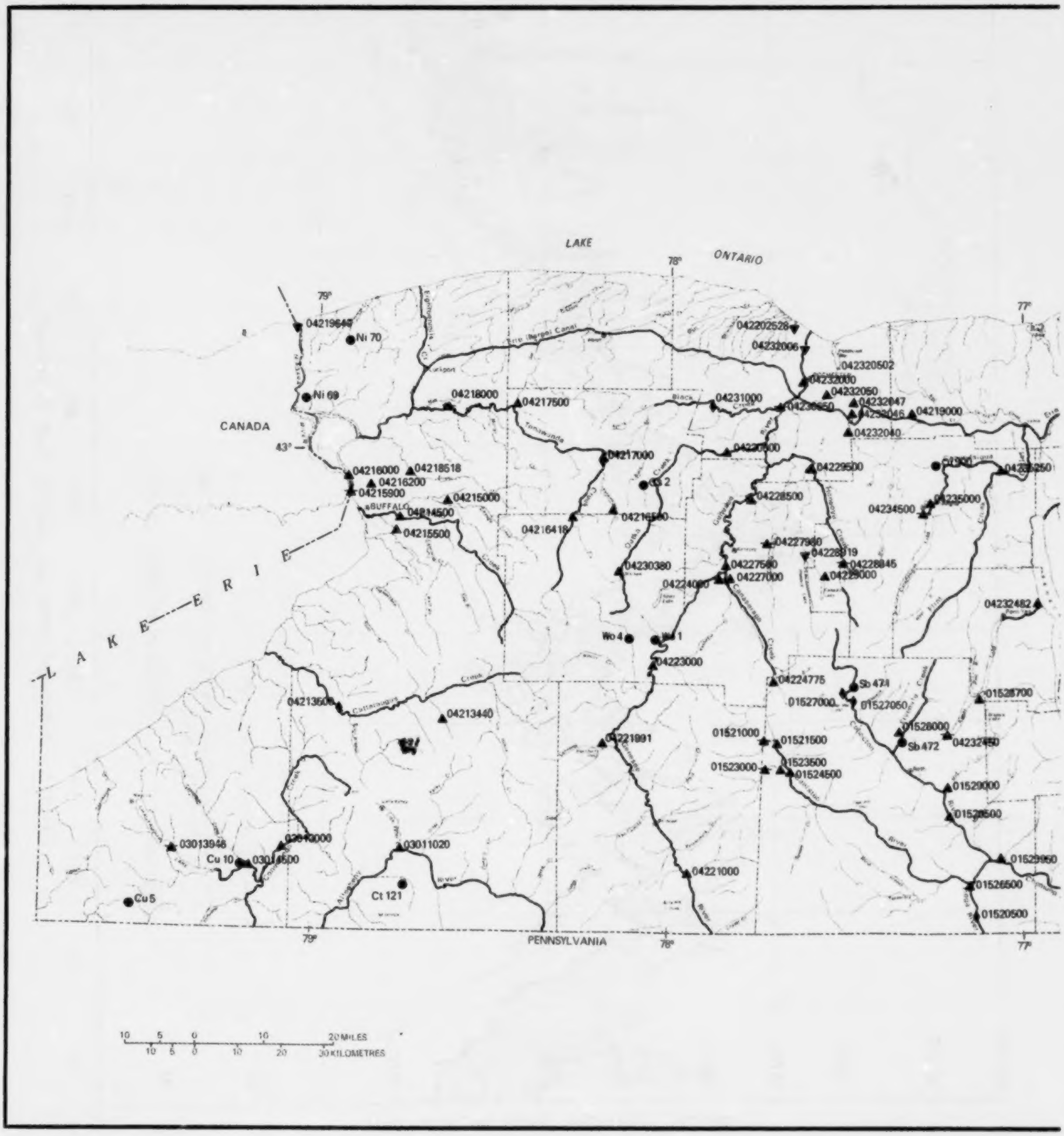
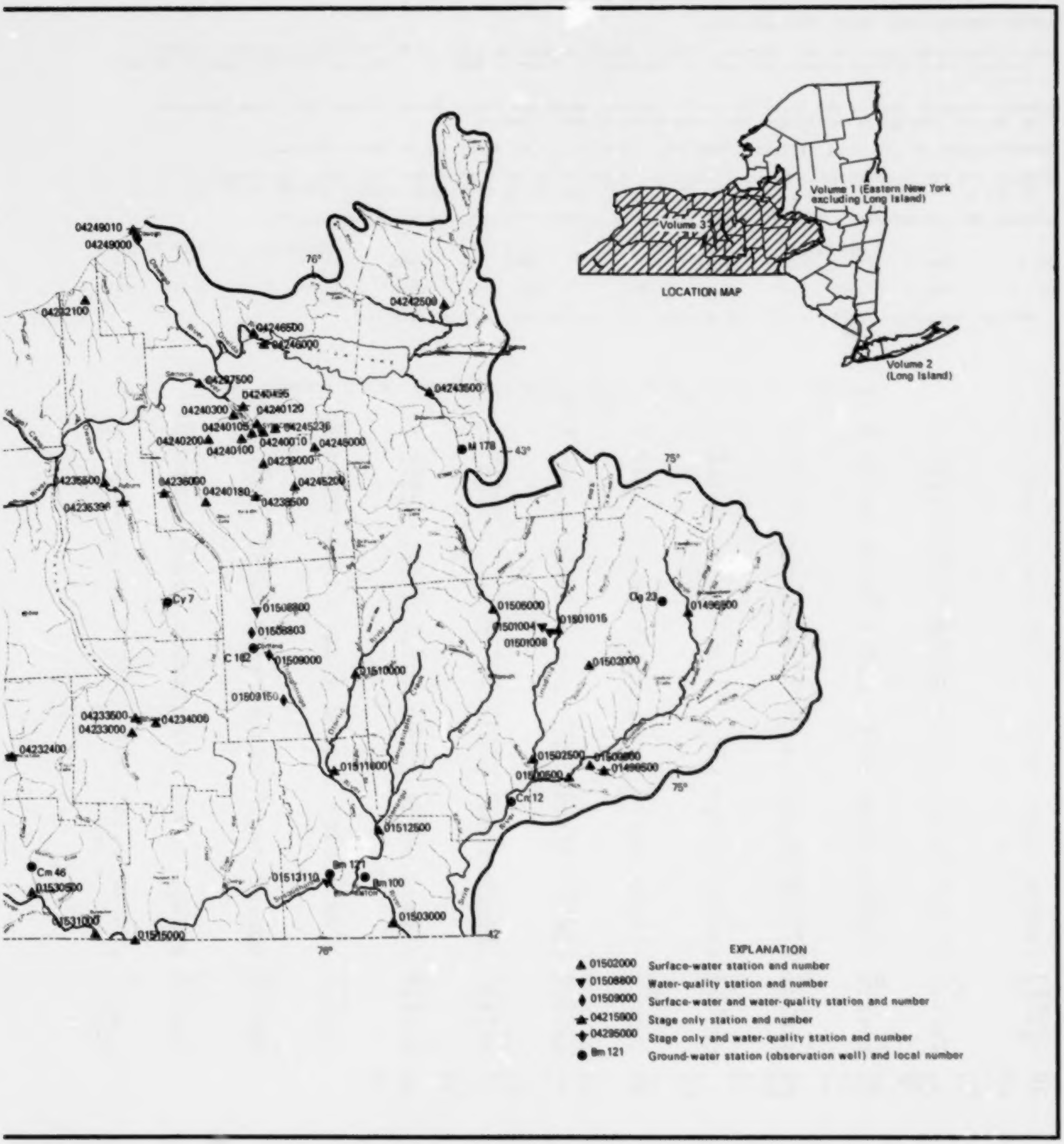


Figure 3.-- Hydrographic comparisons, Allegheny River at Salamanca, N Y


LAKE ONTARIO
LAKE ERIE
CANADA
PENNSYLVANIA
79°
78°
77°
43°
BUFFALO
04219640
Ni 70
Ni 69
04218000
04217500
04231000
04232050
04232047
04232046
04219000
04232040
042202528
04232006
042320502
04232000
04216000
04218518
04216200
04215900
04215000
04214500
04215500
04217000
04216418
04229500
04228500
04234500
04235000
04227980
04228819
04228845
04227500
04227000
04224000
04230380
04232482
Wo 4
04223000
04224775
Sb 471
01527000
01527050
01528700
04213600
04213440
04221991
01521000
01521500
01523500
01523000
01524500
01528000
Sb 472
04232450
01529000
01529500
01529950
01526500
01520500
04221000
03013946
Cu 10
03011020
Ct 121
Cu 5
10 5 0 10 20 MILES
10 5 0 10 20 30 KILOMETRES

Base from U.S. Geological Survey
State base map
Shaded relief, 1:500,000, 1956

FIGURE 4.-- LOCATION OF GAGING STATIONS


Volume 1 (Eastern New York excluding Long Island)
Volume 3
Volume 2 (Long Island)
LOCATION MAP
04249010
04249000
76°
04232100
04242500
04246500
04246000
04237500
04240495
04240300
04240120
04240105
04245236
04240200
04240100
04240010
04248000
M 178
43°
04239000
04235600
04236000
04240180
04245200
04238500
04235396
75°
Cy 7
01508800
01508803
C 102
01509000
01510000
01509150
01506000
01501004
01501016
01501008
Og 23
01496500
01502000
04233500
04234000
04233000
04232400
01511000
01502500
01500500
01500000
01499500
75°
Cn 12
01512500
Cm 46
01530500
Bm 121
01513110
Bm 100
01503000
01531000
01515000
42°
76°
EXPLANATION
01502000 Surface-water station and number
01508800 Water-quality station and number
01509000 Surface-water and water-quality station and number
04215900 Stage only station and number
04295000 Stage only and water-quality station and number
Bm 121 Ground-water station (observation well) and local number

AND OBSERVATION WELLS IN WESTERN NEW YORK

01496500 OAKS CREEK AT INDEX, NY

LOCATION.--Lat 42°39'56", long 74°57'36", Otsego County, Hydrologic Unit 02050101, on right bank 200 ft (61 m) upstream from bridge on State Highway 28 at Index, 0.5 mi (0.8 km) upstream from mouth, and 3 mi (5 km) southwest of Cooperstown.

DRAINAGE AREA.—102 mi^2 (264 km^2).

PERIOD OF RECORD.--November 1929 to September 1932, March 1937 to current year.

REVISED RECORDS.—WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,174.50 ft (357.988 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Sept. 30, 1932, nonrecording gage at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Prior to June 1964, flow regulated by natural storage in Canadarago Lake, thereafter by dam at outlet.

AVERAGE DISCHARGE.—45 years (1931-32, 1938-80), 172 ft^3/s (4.871 m^3/s), 22.90 in/yr (582 mm/yr).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,320 ft^3/s (94.0 m^3/s) Oct. 17, 1977, gage height, 7.62 ft (2.323 m); minimum discharge, 1.3 ft^3/s (0.037 m^3/s) Aug. 4, 5, 1962, gage height, 1.79 ft (0.546 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 900 ft^3/s (25.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	0300	*1,480	41.9	*5.68	1.731	Mar. 30	0430	1,070	30.3	5.16	1.573

Minimum discharge, 7.9 ft^3/s (0.22 m^3/s) Sept. 25, gage height, 2.20 ft (0.671 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	14	220	110	24	27	736	293	37	160	46	14
2	18	65	208	100	24	28	684	279	37	135	88	14
3	18	120	197	96	24	28	634	269	55	147	91	18
4	18	70	184	90	24	29	639	248	49	109	80	18
5	39	62	173	86	24	30	690	229	45	142	66	19
6	38	59	165	82	23	32	612	214	40	333	63	17
7	36	62	160	78	23	34	560	203	58	181	58	18
8	30	62	147	76	24	60	526	189	81	162	52	14
9	31	63	133	72	24	130	540	181	80	220	49	13
10	40	115	128	74	24	110	591	168	76	173	44	13
11	98	155	122	80	24	100	540	155	69	111	43	12
12	94	145	120	100	23	84	507	147	62	100	43	11
13	86	135	110	83	23	78	493	147	56	88	39	10
14	78	130	100	102	23	74	475	150	52	80	36	10
15	74	122	100	145	23	78	470	140	51	70	41	10
16	68	117	94	111	23	86	440	128	181	66	35	9.6
17	65	107	90	105	23	110	410	117	107	74	31	9.6
18	60	107	84	103	24	360	386	111	83	74	28	14
19	52	100	82	102	26	340	367	109	89	59	26	14
20	23	94	84	96	29	400	341	103	92	52	25	11
21	14	89	86	84	31	596	326	96	102	51	23	11
22	13	86	88	60	31	1200	305	89	92	56	23	10
23	23	83	94	35	30	755	283	83	83	70	23	9.6
24	24	45	120	23	29	695	262	77	76	59	20	9.2
25	19	70	194	24	28	823	200	70	70	49	19	8.7
26	17	113	186	24	28	707	178	66	65	43	18	31
27	17	352	162	25	27	639	162	59	59	39	16	24
28	17	283	152	25	27	634	173	54	58	35	16	16
29	17	255	140	25	27	755	398	49	120	39	15	12
30	16	238	130	25	---	985	323	45	269	59	14	11
31	15	---	120	25	---	830	---	40	---	52	14	---
TOTAL	1176	3518	4173	2266	737	10837	13251	4308	2394	3088	1185	411.7
MEAN	37.9	117	135	73.1	25.4	350	442	139	79.8	99.6	38.2	13.7
MAX	98	352	220	145	31	1200	736	293	269	333	91	31
MIN	13	14	82	23	23	27	162	40	37	35	14	8.7
CFSM	.37	1.15	1.32	.72	.25	3.43	4.33	1.36	.78	.98	.38	.13
IN.	.43	1.28	1.52	.83	.27	3.95	4.83	1.57	.87	1.13	.43	.15

CAL YR 1979 TOTAL 64822.3 MEAN 178 MAX 1690 MIN 5.7 CFSM 1.75 IN 23.64
WTR YR 1980 TOTAL 47344.7 MEAN 129 MAX 1200 MIN 8.7 CFSM 1.27 IN 17.27

01499500 EAST SIDNEY LAKE AT EAST SIDNEY, NY

LOCATION.--Lat 42°19'40", long 75°13'42", Delaware County, Hydrologic Unit 02050101, at East Sidney Dam on Ouleout Creek, 0.3 mi (0.5 km) upstream from bridge on County Highway 44 at East Sidney, 4.4 mi (7.1 km) upstream from mouth, and 4.5 mi (7.2 km) east of Unadilla.

DRAINAGE AREA.--103 mi^2 (267 km^2).

PERIOD OF RECORD.--November 1949 to September 1952 (monthly elevations and contents), October 1952 to current year. Prior to October 1970, published as "East Sidney Reservoir at East Sidney."

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1979, datum 0.05 ft (0.015 m) lower.

REMARKS.--Lake is formed by concrete dam and rockfill dike, completed by Corps of Engineers in June 1950; regulation of outflow began in November 1949; first used for flood regulation on Mar. 28, 1950. Useable capacity, 33,550 acre-ft (41.4 hm^3) between elevations 1,115.0 ft or 339.85 m (sill of conduits) and 1,203.0 ft or 366.67 m (crest of spillway). Dead storage 56 acre-ft (0.07 hm^3). Discharge is controlled by the operation of five gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,194.4 ft (364.05 m) Apr. 6, 1960, contents, 25,100 acre-ft (30.9 hm^3); minimum, 1,115.0 ft (339.85 m) Aug. 31, 1953, Sept. 7-26, Nov. 4, 1964, contents, 56 acre-ft (0.07 hm^3).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,164.43 ft (354.918 m) Mar. 23, contents, 7,420 acre-ft (9.15 hm^3); minimum, 1,137.79 ft (346.798 m) Mar. 12, contents, 1,368 acre-ft (1.69 hm^3).

Capacity table (elevation, in feet, and useable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1938)

1,135.0	1,080	1,160.0	5,910
1,140.0	1,630	1,170.0	9,610
1,145.0	2,360	1,180.0	14,610
1,150.0	3,280	1,190.0	21,370

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1150.83	1150.96	1149.88	1140.59	1140.37	1140.18	1139.87	1140.16	1150.69	1150.30	1150.84	1150.94
2	1151.24	1150.88	1150.28	1140.35	1140.55	1140.22	1140.20	1140.08	1150.72	1150.26	1150.81	1150.84
3	1150.71	1153.00	1149.94	1140.04	1140.71	1140.23	1140.29	1140.70	1150.73	1150.43	1151.42	1150.52
4	1151.25	1151.98	1147.23	1139.96	1140.74	1140.23	1140.92	1140.90	1150.74	1150.43	1150.95	1150.26
5	1151.51	1150.94	1143.98	1140.33	1140.42	1140.29	1141.05	1141.19	1150.72	1150.45	1150.52	1150.21
6	1153.21	1150.54	1140.76	1140.52	1140.11	1140.59	1140.37	1142.58	1150.67	1151.16	1150.53	1150.36
7	1152.83	1150.15	1140.64	1140.64	1140.04	1140.70	1140.14	1143.80	1150.71	1150.69	1150.55	1150.38
8	1151.48	1150.28	1140.96	1140.84	1139.88	1142.64	1140.15	1144.80	1150.82	1150.45	1150.53	1150.30
9	1150.29	1150.13	1141.01	1140.85	1139.51	1142.10	1140.35	1145.61	1150.89	1150.28	1150.46	1150.17
10	1150.41	1150.08	1140.95	1140.73	1139.27	1140.26	1140.79	1146.30	1150.95	1150.57	1150.38	1150.07
11	1150.34	1150.48	1140.79	1140.67	1139.28	1140.48	1140.80	1146.87	1150.70	1150.77	1150.30	1150.06
12	1150.24	1150.62	1140.54	1141.45	1139.69	1138.47	1140.38	1147.39	1150.41	1150.89	1150.26	1150.06
13	1150.20	1150.55	1140.33	1140.25	1140.06	1140.82	1140.11	1147.91	1150.35	1150.94	1150.28	1150.04
14	1150.05	1150.43	1140.19	1140.53	1140.36	1140.88	1140.27	1148.71	1150.27	1150.94	1150.30	1150.04
15	1150.26	1150.28	1140.17	1141.38	1140.54	1140.23	1140.96	1149.52	1150.24	1150.89	1150.41	1150.09
16	1150.42	1150.36	1140.13	1140.55	1140.69	1140.76	1140.39	1150.00	1150.54	1150.82	1150.54	1150.14
17	1150.41	1150.41	1140.32	1140.25	1140.66	1140.96	1140.30	1150.35	1150.82	1150.73	1150.57	1150.21
18	1150.31	1150.41	1140.17	1140.50	1140.65	1146.68	1140.12	1150.58	1150.84	1150.62	1150.57	1150.51
19	1150.14	1150.40	1140.26	1140.67	1140.62	1141.54	1140.53	1150.67	1150.81	1150.47	1150.57	1150.76
20	1150.27	1150.28	1140.54	1140.35	1140.65	1140.73	1140.48	1150.63	1150.80	1150.34	1150.56	1150.81
21	1150.45	1150.13	1140.71	1139.82	1140.67	1142.38	1140.23	1150.50	1150.81	1150.37	1150.53	1150.80
22	1150.56	1150.14	1140.86	1140.08	1140.73	1157.74	1140.40	1150.33	1150.83	1150.56	1150.50	1150.77
23	1150.62	1150.12	1140.50	1140.48	1140.86	1163.92	1140.30	1150.29	1150.79	1150.71	1150.48	1150.73
24	1150.93	1150.13	1140.61	1140.18	1140.97	1162.42	1140.14	1150.42	1150.72	1150.81	1150.44	1150.67
25	1150.25	1150.68	1141.50	1139.97	1140.75	1157.23	1140.38	1150.55	1150.63	1150.88	1150.39	1150.58
26	1150.20	1151.46	1140.84	1140.05	1140.45	1148.85	1140.53	1150.64	1150.53	1150.90	1150.35	1150.69
27	1150.36	1153.35	1140.68	1140.12	1140.30	1141.45	1140.58	1150.67	1150.41	1150.91	1150.33	1150.92
28	1150.57	1150.90	1140.45	1140.18	1140.30	1140.74	1140.76	1150.69	1150.32	1150.90	1150.32	1151.01
29	1150.79	1150.44	1140.17	1140.10	1140.24	1141.44	1141.41	1150.70	1150.48	1150.89	1150.31	1151.03
30	1150.93	1150.22	1140.54	1139.96	---	1142.29	1140.26	1150.68	1151.76	1150.92	1150.31	1150.96
31	1150.97	---	1140.76	1140.13	---	1140.13	---	1150.66	---	1150.89	1150.65	---
MEAN	1150.74	1150.69	1141.83	1140.40	1140.35	1143.79	1140.45	1147.58	1150.69	1150.68	1150.51	1150.50
MAX	1153.21	1153.35	1150.28	1141.45	1140.97	1163.92	1141.41	1150.70	1151.76	1151.16	1151.42	1151.03
MIN	1150.05	1150.08	1140.13	1139.82	1139.27	1138.47	1139.87	1140.08	1150.24	1150.26	1150.26	1150.04
*	3,486	3,281	1,729	1,669	1,656	1,634	1,662	3,427	3,496	3,465	3,467	3,458
**	+.1	-.1	-25.2	-1.0	-.2	-.4	+.5	+28.7	+1.2	-.5	0	-.2

CAL YR 1979 MEAN 1147.71 MAX 1183.86 MIN 1139.53 ** +.2
WTR YR 1980 MEAN 1146.53 MAX 1163.92 MIN 1138.47 ** 0

* Contents, in acre-feet, at end of month.
** Change in contents, equivalent in cubic feet per second.

01500000 OULEOUT CREEK AT EAST SIDNEY, NY

LOCATION.--Lat 42°20'00", long 75°14'07", Delaware County, Hydrologic Unit 02050101, on right bank 0.2 mi (0.3 km) downstream from bridge on County Highway 44, 0.4 mi (0.6 km) downstream from East Sidney Dam, at East Sidney, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--103 mi^2 (267 km^2).

PERIOD OF RECORD.--August 1940 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,086.23 ft (331.083 m) National Geodetic Vertical Datum of 1929. Prior to June 13, 1947, water-stage recorder at site 0.5 mi (0.8 km) upstream at datum 27.30 ft (8.321 m) higher.

REMARKS.--Records good. Since November 1949, flow regulated by East Sidney Lake (see station 01499500).

AVERAGE DISCHARGE.--40 years, 174 ft^3/s (4.928 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,250 ft^3/s (205 m^3/s) Dec. 30, 1942, gage height, 7.62 ft (2.323 m) site and datum then in use, from rating curve extended above 4,000 ft^3/s (113 m^3/s); minimum, 1.2 ft^3/s (0.034 m^3/s), result of construction operations, Aug. 13, 14, 17, 1949, gage height, 0.32 ft (0.098 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 16,700 ft^3/s (473 m^3/s) in July 1935 was determined, by computation of flow over dam and from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,680 ft^3/s (47.6 m^3/s) Mar. 24, gage height, 4.56 ft (1.390 m); minimum, 5.9 ft^3/s (0.17 m^3/s) Mar. 23, gage height, 0.83 ft (0.253 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	93	258	144	29	22	521	247	25	242	24	25
2	204	187	192	141	29	18	427	181	25	85	24	52
3	179	823	369	106	29	18	358	155	25	67	92	98
4	131	660	468	65	48	19	375	156	25	67	112	43
5	161	462	439	53	57	19	524	72	25	44	50	32
6	331	366	277	53	46	30	363	27	24	230	23	32
7	425	284	114	53	40	51	294	28	25	123	23	31
8	436	242	115	57	48	610	270	28	24	100	23	31
9	322	243	115	61	53	896	375	29	30	55	23	32
10	277	187	115	61	35	288	584	29	57	33	23	20
11	216	165	115	61	16	297	404	29	69	33	23	15
12	216	165	114	160	11	135	400	29	39	33	18	15
13	215	165	114	112	11	24	346	29	29	33	13	15
14	161	165	106	80	14	122	322	30	25	33	13	11
15	131	148	93	181	19	103	485	30	17	33	14	9.2
16	131	133	93	167	26	77	379	30	13	33	13	9.2
17	132	134	93	100	30	314	321	30	20	33	13	9.5
18	132	134	71	82	30	1460	255	47	24	33	13	9.4
19	113	134	59	100	30	848	225	62	24	34	13	16
20	71	134	59	115	31	597	224	69	24	22	13	20
21	71	113	59	78	31	891	185	69	24	15	13	20
22	71	102	82	61	31	7.1	156	63	24	15	13	23
23	72	102	115	71	31	482	157	37	24	15	13	20
24	234	102	115	80	48	1300	124	24	24	15	13	20
25	186	104	184	61	55	1600	109	24	24	15	13	20
26	117	274	336	61	48	1370	109	24	24	15	12	21
27	92	1200	184	61	31	698	110	24	24	15	8.7	20
28	92	681	212	61	30	427	136	25	16	15	9.2	20
29	92	455	167	63	30	656	504	25	60	15	9.2	20
30	92	362	141	50	---	1030	273	25	459	21	9.2	38
31	93	---	144	29	---	720	---	25	---	24	9.2	---
TOTAL	5327	8519	5118	2628	967	15129.1	9315	1702	1272	1546	685.5	747.3
MEAN	172	284	165	84.8	33.3	488	311	54.9	42.4	49.9	22.1	24.9
MAX	436	1200	468	181	57	1600	584	247	459	242	112	98
MIN	71	93	59	29	11	7.1	109	24	13	15	8.7	9.2

CAL YR 1979 TOTAL 80238.0 MEAN 220 MAX 1760 MIN 11
WTR YR 1980 TOTAL 52955.9 MEAN 145 MAX 1600 MIN 7.1

01500500 SUSQUEHANNA RIVER AT UNADILLA, NY

LOCATION.--Lat 42°19'17", long 75°19'01", Otsego County, Hydrologic Unit 02050101, on right bank 25 ft (8 m) downstream from bridge on Bridge Street at Unadilla, 1.0 mi (1.6 km) upstream from Carrs Creek, and 1.6 mi (2.6 km) downstream from Ouleout Creek.

DRAINAGE AREA.--982 mi^2 (2,543 km^2).

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 851: 1938(M). WSP 2103: 1966(M); Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 997.25 ft (303.961 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Slight regulation by upstream lakes and reservoirs.

AVERAGE DISCHARGE.--42 years, 1,592 ft^3/s (45.09 m^3/s), 22.02 in/yr (559 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,500 ft^3/s (666 m^3/s) Mar. 14, 1977, gage height, 14.64 ft (4.462 m); minimum, 39 ft^3/s (1.10 m^3/s) Oct. 17, 1964, gage height, 1.38 ft (0.421 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Mar. 18, 1936, reached a stage of 16.6 ft (5.060 m), from floodmarks, discharge, 31,300 ft^3/s (886 m^3/s), from publications of the Corps of Engineers, Baltimore District.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 11,000 ft^3/s (312 m^3/s) and maximum (*):

		Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Mar. 22	2130	*13,900	394	*11.34	3.456

Minimum discharge, 97 ft^3/s (2.75 m^3/s) Sept. 17, gage height, 1.68 ft (0.512 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	386	437	3000	1000	410	300	6280	2410	437	2290	375	173
2	510	645	2500	920	390	290	5150	2100	386	1270	494	219
3	515	2700	2000	860	390	290	4460	1910	373	1030	589	298
4	485	2840	2500	800	400	280	4280	1750	428	911	646	207
5	536	1960	2000	740	410	270	5070	1530	409	762	610	205
6	1290	1600	1700	720	410	351	4440	1370	360	1400	305	180
7	1430	1410	1400	700	400	400	3730	1280	360	1380	442	165
8	1160	1320	1300	680	390	1850	3330	1220	461	988	251	169
9	1000	1240	1200	660	380	4260	3410	1140	526	910	364	194
10	1100	1270	1100	640	360	2620	4580	1070	541	942	226	203
11	904	1300	1000	620	340	2000	4030	984	515	786	298	135
12	865	1210	1000	992	320	1390	3490	944	456	679	285	120
13	896	1130	980	1010	320	944	3370	992	391	610	291	142
14	820	1100	940	827	320	888	3210	1220	355	552	270	130
15	729	1040	900	1220	320	984	3880	1110	326	527	282	138
16	692	1020	860	1140	310	952	3680	944	418	488	263	142
17	651	952	800	881	310	1300	3120	835	657	457	252	103
18	611	928	760	799	310	7000	2760	786	536	433	235	158
19	584	904	700	780	320	5570	2510	812	446	424	216	163
20	520	842	700	720	330	4530	2310	805	428	388	208	135
21	495	786	720	660	330	6210	2160	760	446	353	203	178
22	465	742	741	640	340	11500	1920	717	468	337	155	132
23	432	717	799	620	340	12200	1710	662	434	347	170	163
24	686	717	992	580	330	8270	1530	606	401	371	202	123
25	723	952	1550	560	320	8310	1410	573	368	352	155	142
26	600	1390	2200	560	310	7170	1340	541	343	314	183	148
27	526	6460	1660	520	300	5260	1240	526	324	289	128	352
28	500	5000	1490	500	300	4590	1310	500	308	270	145	293
29	490	4000	1300	490	300	5440	3070	470	556	258	128	225
30	475	3500	1200	470	---	9080	3070	442	3010	270	128	182
31	456	---	1100	440	---	8230	---	423	---	318	128	---
TOTAL	21532	50112	41092	22749	10010	122729	95850	31432	15467	20706	8627	5317
MEAN	695	1670	1326	734	345	3959	3195	1014	516	668	278	177
MAX	1430	6460	3000	1220	410	12200	6280	2410	3010	2290	646	352
MIN	386	437	700	440	300	270	1240	423	308	258	128	103
CFSM	.71	1.70	1.35	.75	.35	4.03	3.25	1.03	.53	.68	.28	.18
IN.	.82	1.90	1.56	.86	.38	4.65	3.63	1.19	.59	.78	.33	.20

CAL YR 1979 TOTAL 659242 MEAN 1806 MAX 20000 MIN 132 CFSM 1.84 IN 24.97
WTR YR 1980 TOTAL 445623 MEAN 1218 MAX 12200 MIN 103 CFSM 1.24 IN 16.88

01501004 MILL BROOK AT SHERBURNE TURNPIKE, NEW BERLIN, NY

LOCATION.--Lat 42°38'13", long 75°21'07", Chenango County, Hydrologic Unit 02050101, at culvert on Sherburne Turnpike, 0.5 mi (0.8 km) northwest of New Berlin, and 1.6 mi (2.6 km) upstream from mouth.

DRAINAGE AREA.--1.78 mi^2 (4.61 km^2).

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-76 (b), 1977 (a), 1978-80 (b).
MINOR ELEMENTS DATA: 1975-76, 1978-80 (a).
NUTRIENT DATA: 1975-76 (b), 1977 (a), 1978-80 (b).
BIOLOGICAL DATA:
Bacteria--1975-76 (a), 1978 (b), 1979-80 (a).

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (FT^3/S)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
MAY 22...	1200	.61	141	7.2	13.0	4.0	9.4	91	--	--	--
JUN 26...	1300	.14	191	7.5	16.0	--	7.7	80	550	31	61
JUL 22...	1200	.19	180	7.5	20.0	.55	7.2	77	--	--	--
AUG 27...	1320	.12	235	6.9	18.0	.20	7.3	78	4000	K77	76
SEP 18...	1300	.13	216	7.0	13.5	.50	10.6	104	--	--	--

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
MAY 22...	64	8	22	2.3	1.9	.9	56	11	1.4	.1	3.9
JUN 26...	87	12	30	3.0	2.1	1.1	75	9.9	1.6	.1	4.3
JUL 22...	85	3	29	3.0	2.0	1.1	82	8.1	1.8	.1	4.7
AUG 27...	120	16	40	4.0	2.2	1.0	100	9.7	2.2	.1	5.9
SEP 18...	100	14	35	3.4	2.2	1.1	87	10	2.6	.1	5.7

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS P)
MAY 22...	87	77	.20	.00	.20	.00	.06	.06	.26	.01	.01
JUN 26...	--	97	.18	.00	.18	.02	.04	.06	.24	--	--
JUL 22...	100	99	.16	.00	.16	.02	.11	.13	.29	.07	.00
AUG 27...	129	125	.12	.00	.12	.00	.05	.05	.17	.01	.00
SEP 18...	120	112	.41	.00	.41	.00	.05	.05	.46	.01	.00

DATE	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
MAY 22...	--	--	--	--	--	--	--	--	--	--
JUN 26...	0	5	<10	3	140	3	30	<.1	0	10
JUL 22...	--	--	--	--	--	--	--	--	--	--
AUG 27...	0	0	10	2	140	2	70	<.1	0	20
SEP 18...	--	--	--	--	--	--	--	--	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

01501008 MILL BROOK TRIBUTARY ABOVE NEW BERLIN, NY

LOCATION.--Lat 42°37'34", long 75°21'06", Chenango County, Hydrologic Unit 02050101, at culvert on town highway, 0.4 mi (0.6 km) west of New Berlin, and 0.7 mi (1.1 km) upstream from mouth.

DRAINAGE AREA.—1.70 mi^2 (4.40 km^2).

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-76 (b), 1977 (a), 1978-80 (b).
MINOR ELEMENTS DATA: 1975-76, 1978-80 (a).
NUTRIENT DATA: 1975-76 (b), 1977 (a), 1978-80 (b).
BIOLOGICAL DATA:
Bacteria--1975-76 (a), 1978 (b), 1979-80 (a).

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (FT^3/S)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
MAY 22...	1000	.52	233	7.7	13.0	.02	9.3	90	--	--	--
JUN 26...	1100	.19	290	7.8	18.0	.70	7.8	85	3500	23	77
JUL 22...	1100	.50	250	7.8	20.0	.40	7.5	83	--	--	--
AUG 27...	1200	.14	291	7.3	17.0	1.8	9.3	97	1100	K12	34
SEP 18...	1100	.58	279	7.6	14.0	.50	12.2	120	--	--	--

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
MAY 22...	110	12	38	3.5	3.8	.8	97	12	5.5	.1	3.5
JUN 26...	130	8	45	3.8	3.7	1.1	120	10	6.4	.1	4.6
JUL 22...	120	10	42	3.7	3.5	1.2	110	8.0	5.2	.1	4.7
AUG 27...	150	16	51	4.6	4.6	1.1	130	12	5.7	.1	5.8
SEP 18...	130	11	46	4.0	3.5	1.0	120	10	5.5	.1	5.3

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS P)
MAY 22...	143	126	.75	.00	.75	.03	.10	.13	.88	.01	.01
JUN 26...	156	147	.70	.00	.70	.01	.09	.10	.80	.02	.00
JUL 22...	142	135	.52	.00	.52	.02	.13	.15	.67	.05	.00
AUG 27...	174	163	.60	.00	.60	.00	.05	.05	.65	.01	.00
SEP 18...	153	148	.45	.00	.45	.00	.13	.13	.58	.02	.00

DATE	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
MAY 22...	--	--	--	--	--	--	--	--	--	--
JUN 26...	1	0	<10	2	310	3	20	<.1	0	10
JUL 22...	--	--	--	--	--	--	--	--	--	--
AUG 27...	0	1	10	2	590	8	30	<.1	0	20
SEP 18...	--	--	--	--	--	--	--	--	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

01501015 MILL BROOK AT NEW BERLIN, NY

LOCATION.--Lat 42°37'32", long 75°19'43", Chenango County, Hydrologic Unit 02050101, on left bank at downstream side of bridge on Academy Street at New Berlin and 80 ft (24 m) upstream from mouth.

DRAINAGE AREA.--4.54 mi^2 (12.02 km^2).

PERIOD OF RECORD.--May 1974 to September 1976, October 1976 to current year (no winter records), discontinued.

REVISED RECORDS.--WDR NY-76-1: 1974, 1975 (M, P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,088.89 ft (331.894 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 450 ft^3/s (12.7 m^3/s) Mar. 30, and Oct. 17, 1977; maximum gage height, 3.19 ft (0.972 m) Mar. 5, 1979 (backwater from ice); minimum daily discharge, 0.22 ft^3/s (0.006 m^3/s) Sept. 12, 13, 22, 24, 1980; minimum gage height, 0.43 ft (0.131 m) Aug. 10, 1979, Sept. 8, 9, 11-13, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 80 ft^3/s (2.3 m^3/s) and maximum(*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 18	unknown	130	3.68	1.78	0.543	Mar. 21	1715	*132	3.74	*1.79	0.546

Minimum daily discharge, 0.22 ft^3/s (0.006 m^3/s) Sept. 12, 13, 22, 24; minimum gage height. 0.43 ft (0.131 m) Sept. 8, 9, 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	2.1				1.4	21	7.3	1.5	2.2	.69	.35
2	1.1	8.5				1.3	18	6.5	1.5	1.7	.78	.47
3	1.7	15				1.2	15	6.1	1.8	1.4	1.3	.61
4	1.8	7.7				1.2	27	5.3	1.5	1.2	.98	.47
5	2.5	5.7				1.3	26	5.0	1.2	1.6	.69	.61
6	4.3	5.0				1.5	18	4.7	.98	2.2	.61	.54
7	2.5	4.6				2.0	15	4.7	2.5	1.8	.54	.30
8	2.1	4.6				3.5	14	4.3	2.5	1.7	.61	.26
9	3.0	4.3				15	19	3.8	1.6	1.6	.61	.26
10	3.0	5.7				10	23	3.5	1.5	1.5	.47	.35
11	2.5	5.0				7.0	16	3.5	1.2	1.3	.54	.26
12	2.8	4.3				6.0	14	3.5	1.1	1.6	.69	.22
13	3.5	4.0				5.4	15	4.0	.98	1.2	.61	.22
14	3.5	4.0				4.8	14	4.0	.98	1.1	.61	.26
15	3.5	4.3				4.4	16	3.5	1.3	.98	.98	.26
16	3.2	4.0				4.0	13	3.0	2.0	.98	.61	.26
17	3.0	3.8				10	12	2.8	1.1	.98	.54	.61
18	3.0	4.0				58	11	2.8	.98	.88	.47	.98
19	3.0	3.8				22	9.5	2.8	.69	.69	.47	.41
20	3.0	3.5				26	9.0	2.5	2.9	.69	.54	.35
21	2.5	3.5				64	8.6	2.3	1.8	.78	.47	.26
22	2.3	3.2				55	6.1	2.3	1.2	1.3	.41	.22
23	2.8	3.2				22	5.3	2.1	1.1	1.5	.41	.26
24	5.8	4.3				22	5.3	2.0	.98	.98	.41	.22
25	3.2	8.0				29	5.3	1.8	.88	.78	.41	.44
26	2.5	21				20	5.0	1.8	.78	.69	.35	1.8
27	2.3	23				18	4.3	1.6	.78	.69	.35	.54
28	2.3	13				19	9.0	1.5	1.2	.61	.35	.35
29	2.3	10				44	15	1.5	1.8	.78	.35	.30
30	2.1	8.1				39	9.0	1.5	3.0	.88	.35	.35
31	2.1	---				26	---	1.5	---	.78	.47	---
TOTAL	84.4	201.2				544.0	398.4	103.5	43.33	37.07	17.67	12.79
MEAN	2.72	6.71				17.5	13.3	3.34	1.44	1.20	.57	.43
MAX	5.8	23				64	27	7.3	3.0	2.2	1.3	1.8
MIN	1.1	2.1				1.2	4.3	1.5	.69	.61	.35	.22
CFSM	.59	1.45				3.77	2.87	.72	.31	.26	.12	.09
IN.	.68	1.61				4.36	3.19	.83	.35	.30	.14	.10

01502000 BUTTERNUT CREEK AT MORRIS, NY

LOCATION.--Lat 42°32'43", long 75°14'22", Otsego County, Hydrologic Unit 02050101, on right bank 15 ft (5 m) upstream from bridge on State Highway 23 at Morris, and 0.2 mi (0.3 km) upstream from Calhoun Creek.

DRAINAGE AREA.--59.7 mi^2 (155 km^2).

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 921: 1939. WSP 2103: Drainage area. WRD NY 1974: 1973(P).

GAGE.--Water-stage recorder. Datum of gage 1096.21 ft (334.125 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--42 years, 101 ft^3/s (2.860 m^3/s), 22.97 in/yr (583 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,980 ft^3/s (169 m^3/s) Oct. 17, 1977, gage height, 9.44 ft (2.877 m); minimum daily, 1.3 ft^3/s (0.037 m^3/s) Sept. 24, 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft^3/s (39.6 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Mar. 22	0430	*3,010	85.2	*7.55	2.301	Mar. 29	2400	1,410	39.9	5.97	1.820

Minimum discharge, 6.0 ft^3/s (0.17 m^3/s) Aug. 29, gage height, 1.45 ft (0.442 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	29	122	70	27	16	300	180	24	153	24	8.3
2	18	47	111	64	27	15	250	160	24	109	31	8.1
3	18	187	97	54	26	14	220	150	34	105	34	8.2
4	28	117	93	50	25	14	296	130	28	86	32	9.3
5	23	93	87	48	26	15	343	120	24	93	25	9.9
6	47	86	87	46	26	16	258	110	21	189	29	11
7	38	80	83	44	25	17	230	100	31	103	24	9.3
8	32	80	76	42	24	100	215	90	41	86	21	11
9	34	73	66	41	23	200	248	86	38	83	20	11
10	37	94	64	40	22	100	324	80	34	69	18	11
11	32	85	63	43	21	84	240	78	29	63	19	9.2
12	31	79	63	60	21	74	220	76	25	58	19	8.8
13	36	74	78	45	21	63	210	78	23	48	18	8.3
14	36	75	68	59	20	61	210	80	21	43	15	8.1
15	31	71	61	90	20	59	220	70	21	42	18	8.1
16	30	70	58	59	20	57	180	62	46	43	16	7.8
17	29	64	54	52	20	93	160	57	32	39	13	7.8
18	28	65	50	48	21	790	130	54	26	42	13	9.7
19	27	60	45	45	21	360	110	54	23	33	14	11
20	26	57	52	42	21	410	100	51	26	31	14	9.3
21	25	53	48	40	21	520	94	48	33	29	11	8.3
22	24	52	52	38	20	1900	90	46	27	32	11	7.7
23	24	51	57	36	19	500	86	43	23	39	9.8	7.8
24	45	57	82	35	19	420	84	40	21	32	8.8	7.8
25	41	140	146	34	18	330	82	38	19	28	9.3	8.7
26	35	192	146	33	18	340	82	35	18	26	9.3	24
27	32	380	114	32	18	420	80	33	17	24	8.8	19
28	31	213	100	31	17	460	110	31	16	23	8.8	14
29	32	171	90	30	17	700	340	28	138	23	7.8	12
30	30	143	84	29	---	880	210	27	382	33	6.7	11
31	29	---	78	28	---	520	---	25	---	26	7.4	---
TOTAL	946	3038	2475	1408	624	9548	5722	2260	1265	1833	515.7	305.5
MEAN	30.5	101	79.8	45.4	21.5	308	191	72.9	42.2	59.1	16.6	10.2
MAX	47	380	146	90	27	1900	343	180	382	189	34	24
MIN	17	29	45	28	17	14	80	25	16	23	6.7	7.7
CFSM	.51	1.69	1.34	.76	.36	5.16	3.20	1.22	.71	.99	.28	.17
IN.	.59	1.89	1.54	.88	.39	5.95	3.57	1.41	.79	1.14	.32	.19

CAL YR 1979 TOTAL 40528.8 MEAN 111 MAX 3260 MIN 6.2 CFSM 1.86 IN 25.25
WTR YR 1980 TOTAL 29940.2 MEAN 81.8 MAX 1900 MIN 6.7 CFSM 1.37 IN 18.66

01502500 UNADILLA RIVER AT ROCKDALE, NY

LOCATION.--Lat 42°22'40", long 75°24'23", Chenango County, Hydrologic Unit 02050101, on right bank 400 ft (122 m) downstream from Chenango-Otsego County highway bridge at Rockdale, and 0.7 mi (1.1 km) downstream from Kent Brook.

DRAINAGE AREA.--520 mi^2 (1,347 km^2).

PERIOD OF RECORD.--November 1929 to September 1933, January 1937 to current year.

REVISED RECORDS.--WRD NY 1974: 1973 (P).

GAGE.--Water-stage recorder. Datum of gage is 992.11 ft (302.395 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Sept. 30, 1933, nonrecording gage at bridge 400 ft (122 m) upstream at datum 0.73 ft (0.223 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--46 years (1931-33, 1938-80), 847 ft^3/s (23.99 m^3/s), 22.12 in/yr (562 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft^3/s (493 m^3/s) Dec. 31, 1942, gage height, 12.98 ft (3.956 m); minimum daily, 27 ft^3/s (0.76 m^3/s) Sept. 20-27, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,700 ft^3/s (161 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	2030	*9,330	264	*9.98	3.042

Minimum discharge, 65 ft^3/s (1.841 m^3/s) Sept. 17, gage height, 3.60 ft (1.097 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	183	1030	600	230	140	3320	1560	165	1670	180	83
2	119	284	909	540	230	140	2650	1300	168	925	295	93
3	115	1230	823	500	220	140	2260	1150	210	805	337	90
4	142	1150	743	430	210	140	2240	1020	264	650	518	91
5	145	779	708	400	210	130	2850	899	214	519	262	109
6	289	600	677	370	220	140	2300	823	179	1740	199	105
7	300	539	643	350	210	150	1940	787	198	1350	175	90
8	227	530	580	330	200	1100	1650	743	364	811	156	84
9	206	490	500	320	190	1700	1750	677	490	681	142	78
10	223	632	460	300	180	1200	2480	632	377	588	131	80
11	202	665	450	290	170	1000	2260	582	334	480	130	75
12	186	556	450	467	170	700	1920	556	279	443	134	72
13	194	498	490	490	160	540	1800	600	231	372	135	71
14	227	498	500	445	160	480	1680	717	202	311	127	70
15	236	522	460	1000	150	450	1840	665	187	275	135	71
16	210	522	420	860	150	450	1700	547	316	255	145	69
17	190	475	400	600	150	560	1440	452	611	237	131	69
18	176	475	390	500	150	4000	1270	410	328	255	116	79
19	168	452	380	450	160	3410	1150	423	245	251	110	87
20	158	410	390	400	160	2850	1040	410	245	212	111	93
21	152	383	400	340	160	3960	980	364	383	191	106	86
22	145	364	410	340	160	7940	889	328	423	202	102	78
23	145	352	430	330	150	7570	796	300	311	279	100	75
24	274	370	726	310	150	4070	743	274	245	316	93	72
25	340	823	1230	300	150	3880	743	250	214	256	88	72
26	284	1430	1590	290	150	3330	761	227	190	203	86	151
27	236	2940	1210	280	150	2530	688	206	172	177	83	139
28	218	2180	990	260	150	2360	743	194	165	162	81	129
29	214	1540	880	250	140	3100	1810	183	611	161	80	107
30	206	1230	800	240	---	5290	2100	172	2820	175	80	90
31	194	---	700	240	---	4590	---	168	---	191	81	---
TOTAL	6257	23102	20769	12822	5040	68040	49793	17619	11141	15143	4649	2658
MEAN	202	770	670	414	174	2195	1660	568	371	488	150	88.6
MAX	340	2940	1590	1000	230	7940	3320	1560	2820	1740	518	151
MIN	115	183	380	240	140	130	688	168	165	161	80	69
CFSM	.39	1.48	1.29	.80	.34	4.22	3.19	1.09	.71	.94	.29	.17
IN.	.45	1.65	1.49	.92	.36	4.87	3.56	1.26	.80	1.08	.33	.19

CAL YR 1979 TOTAL 347129 MEAN 951 MAX 15400 MIN 69 CFSM 1.83 IN 24.83
WTR YR 1980 TOTAL 237033 MEAN 648 MAX 7940 MIN 69 CFSM 1.25 IN 16.96

01503000 SUSQUEHANNA RIVER AT CONKLIN, NY

LOCATION.--Lat 42°02'07", long 75°48'12", Broome County, Hydrologic Unit 02050101, on left bank at abutment of former highway bridge, 500 ft (152 m) upstream from bridge on County Highway 304 at Conklin, 0.7 mi (1.1 km) downstream from Little Snake Creek, and 3.5 mi (5.6 km) downstream from Pennsylvania-New York State line.

DRAINAGE AREA.--2,232 mi^2 (5,781 km^2).

PERIOD OF RECORD.--November 1912 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 841.04 ft (256.349 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 4, 1914, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Minor regulation by upstream lakes and reservoirs.

AVERAGE DISCHARGE.--67 years (1914-80), 3,626 ft^3/s (102.7 m^3/s), 22.06 in/yr (560 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,600 ft^3/s (1,740 m^3/s) Mar. 18, 1936, gage height, 20.14 ft (6.139 m); maximum gage height, 20.83 ft (6.349 m) Mar. 22, 1948; minimum discharge, 85 ft^3/s (2.41 m^3/s) Oct. 14, 1964, gage height, 1.30 ft (0.396 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 18,000 ft^3/s (510 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)	Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Mar. 22	0100	*25,400	719	*12.59	3.837	Mar. 31	1400	19,700	558	10.94	3.335

Minimum discharge, 261 ft^3/s (7.39 m^3/s) Sept. 17, gage height, 1.85 ft (0.564 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	720	1130	5370	2900	900	600	16900	6720	786	6420	599	326
2	1070	1350	4670	2610	880	580	12900	5410	795	4360	649	328
3	1330	5220	4100	2400	840	580	10600	4980	778	2710	805	393
4	2050	7440	3830	2100	860	560	9610	4360	769	2180	1240	481
5	1610	5820	3670	1800	880	540	10500	3850	812	1920	1300	512
6	2820	4370	3450	1700	920	700	10300	3390	820	1870	1210	520
7	3250	3700	3200	1600	900	800	8390	3010	769	3410	904	522
8	3030	3290	2870	1500	860	3100	7120	2790	795	3120	697	466
9	2610	2980	2650	1400	820	7600	8600	2620	908	2180	705	392
10	2730	2900	2430	1300	780	7400	11400	2430	1180	1860	560	367
11	2410	3080	2250	1400	740	4900	10800	2270	1240	1810	588	355
12	2070	2930	2170	1600	700	3700	8700	2170	1120	1650	493	350
13	1960	2670	2170	1900	680	3200	7580	2120	1000	1420	531	308
14	1930	2520	2330	1700	640	1900	7190	2900	872	1260	539	269
15	1800	2430	2300	2100	620	1800	8550	3000	786	1110	607	282
16	1660	2400	2100	2700	620	2000	8290	2620	812	1000	589	290
17	1500	2310	1900	2600	600	2200	7210	2220	890	922	615	269
18	1380	2190	1600	2140	640	10000	6160	1960	1270	853	539	317
19	1280	2110	1500	1930	660	15000	5470	1860	1190	793	497	308
20	1200	2010	1400	1820	680	11300	4960	1850	945	793	470	308
21	1110	1890	1500	1710	680	14100	4580	1780	872	757	436	331
22	1060	1800	1600	1540	680	23900	4210	1670	917	710	411	303
23	992	1750	1820	1400	660	23500	3800	1520	1030	689	396	317
24	1420	1720	2310	1300	660	22100	3390	1380	945	690	355	286
25	2010	2380	3630	1200	640	18100	3150	1250	829	771	337	282
26	1900	4390	5010	1200	620	15900	3000	1120	742	760	363	290
27	1580	8810	5260	1100	620	12400	2920	1010	681	672	328	322
28	1430	12300	4250	1100	620	10100	3360	936	621	592	324	388
29	1380	8700	3720	1000	600	11700	4840	881	607	560	303	571
30	1330	6460	3390	960	---	16800	7720	820	1840	595	301	485
31	1230	---	3180	920	---	19300	---	769	---	612	375	---
TOTAL	53852	113050	91630	52630	21000	266360	222200	75666	27621	49049	18066	10938
MEAN	1737	3768	2956	1698	724	8592	7407	2441	921	1582	583	365
MAX	3250	12300	5370	2900	920	23900	16900	6720	1840	6420	1300	571
MIN	720	1130	1400	920	600	540	2920	769	607	560	301	269
CFSM	.78	1.69	1.32	.76	.32	3.85	3.32	1.09	.41	.71	.26	.16
IN.	.90	1.88	1.53	.88	.35	4.44	3.70	1.26	.46	.82	.30	.18

CAL YR 1979 TOTAL 1546558 MEAN 4237 MAX 44500 MIN 308 CFSM 1.90 IN 25.78
WTR YR 1980 TOTAL 1002062 MEAN 2738 MAX 23900 MIN 269 CFSM 1.23 IN 16.70

01505000 CHENANGO RIVER AT SHERBURNE, NY

LOCATION.--Lat 42°40'43", long 75°30'39", Chenango County, Hydrologic Unit 02050102, on right bank 20 ft (6 m) downstream from bridge on State Highway 80, 0.5 mi (0.8 km) west of Sherburne, and 0.5 mi (0.8 km) downstream from Handsome Brook.

DRAINAGE AREA.--263 mi^2 (681 km^2).

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 851: 1938(M). WSP 1502: 1955. WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,037.16 ft (316.126 m) National Geodetic Vertical Datum of 1929. July 22 to Dec. 9, 1953, nonrecording gage or reference point and Dec. 10, 1953 to Jan. 26, 1955, water-stage recorder at temporary site 1.5 mi (2.4 km) downstream, at datum approximately 11.9 ft (3.63 m) lower, during period of construction of highway bridge.

REMARKS.--Records fair except those for winter periods, which are poor. Slight diurnal fluctuation at low flow caused by mill several miles upstream from station. Small diversion during summer months for more than 100 years from Chenango River basin to Oriskany Creek through Oriskany Creek feeder at Solsville for operation of Erie (Barge) Canal.

AVERAGE DISCHARGE.--42 years, 408 ft^3/s (11.55 m^3/s), 21.07 in/yr (535 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft^3/s (295 m^3/s) Mar. 6, 1979, gage height, 9.94 ft (3.030 m); maximum gage height, 9.99 ft (3.045 m) Dec. 30, 1942 (ice jam); minimum discharge, 12 ft^3/s (0.34 m^3/s) Sept. 25, 1964; minimum gage height, 1.52 ft (0.436 m) Sept. 19, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1936, reached a stage of 10.6 ft (3.23 m), from records of National Weather Service.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,500 ft^3/s (99.1 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	0330	*5,560	157	*9.19	2.801

Minimum discharge, 39 ft^3/s (1.10 m^3/s) Sept. 30; minimum gage height, 2.06 ft (0.628 m) Oct. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	88	450	272	120	92	1650	625	126	345	90	63
2	50	126	388	258	110	90	1410	544	133	261	128	61
3	50	441	328	210	110	88	1210	483	188	241	181	70
4	58	315	303	190	110	90	1250	410	150	192	147	74
5	56	237	284	180	110	92	1290	363	123	195	113	64
6	113	199	272	170	110	96	1090	328	109	803	100	59
7	126	172	276	160	110	100	948	307	159	464	90	55
8	98	165	258	150	120	180	848	291	269	354	84	50
9	88	153	228	150	110	270	1260	276	276	291	82	49
10	88	178	221	150	110	250	2070	258	247	237	76	49
11	82	181	214	170	100	260	1480	244	214	195	74	48
12	80	162	221	220	100	200	1150	241	175	185	74	46
13	98	150	261	200	98	180	1090	247	144	153	74	45
14	116	153	237	300	96	170	953	269	131	139	70	45
15	111	153	221	625	94	160	1270	251	123	128	82	45
16	104	162	206	380	92	190	1070	221	336	123	74	43
17	93	150	200	303	92	250	905	192	254	126	68	43
18	86	168	190	258	90	1970	803	181	206	126	64	56
19	84	156	190	234	90	1380	724	192	165	116	61	53
20	82	144	180	210	92	1410	654	178	210	109	64	49
21	76	136	180	180	96	2600	602	168	261	104	61	46
22	72	133	180	180	100	4850	540	156	231	159	58	45
23	70	136	200	170	110	2770	493	144	185	221	55	45
24	133	141	358	160	110	1970	441	136	153	165	53	43
25	141	251	635	150	100	2050	393	131	133	133	50	43
26	123	630	592	150	100	1670	340	126	123	113	49	50
27	109	1420	488	140	98	1380	303	116	116	107	46	50
28	104	838	410	140	94	1330	372	111	113	98	45	46
29	104	659	380	130	92	1790	864	107	150	98	45	43
30	98	535	354	130	---	2330	714	104	405	102	49	42
31	93	---	307	120	---	1970	---	100	---	98	68	---
TOTAL	2839	8532	9212	6440	2964	32228	28187	7500	5608	6181	2375	1520
MEAN	91.6	284	297	208	102	1040	940	242	187	199	76.6	50.7
MAX	141	1420	635	625	120	4850	2070	625	405	803	181	74
MIN	50	88	180	120	90	88	303	100	109	98	45	42
CFSM	.35	1.08	1.13	.79	.39	3.95	3.57	.92	.71	.76	.29	.19
IN.	.40	1.21	1.30	.91	.42	4.56	3.99	1.06	.79	.87	.34	.21

CAL YR 1979 TOTAL 157914 MEAN 433 MAX 8570 MIN 36 CFSM 1.65 IN 22.34
WTR YR 1980 TOTAL 113586 MEAN 310 MAX 4850 MIN 42 CFSM 1.18 IN 16.07

01508800 FACTORY BROOK AT HOMER, NY

LOCATION.--Lat 42°38'36", long 76°11'19", Cortland County, Hydrologic Unit 02050102, at bridge on State Highway 281, in Homer, 1.1 mi (1.8 km) upstream from mouth.

DRAINAGE AREA.--15.8 mi^2 (40.9 km^2).

PERIOD OF RECORD.--Water Years 1970, 1972 to current year.
CHEMICAL DATA: 1970 (a), 1972 (b), 1973-74 (d), 1975-80 (b).
NUTRIENT DATA: 1970 (a), 1973-74 (d), 1975-80 (b).
BIOLOGICAL DATA:
Bacteria--1973-74 (d), 1975-80 (b).

REMARKS.--Prior to November 1972, sampling site at bridge on State Highway 41, 0.1 mi (0.2 km) downstream.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC										
10...	1300	12	350	7.6	4.5	13.0	102	260	220	71
MAY										
01...	1300	18	315	7.9	11.0	10.1	89	K24	K34	K24
AUG										
05...	1315	7.5	332	7.9	22.5	9.9	--	2000	K1000	220
SEP										
25...	1230	2.4	343	7.8	12.0	7.1	67	680	K650	660

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
DEC									
10...	170	29	51	10	4.0	1.0	140	16	7.8
MAY									
01...	150	22	45	9.6	3.9	.5	130	17	7.2
AUG									
05...	170	26	50	10	4.2	1.2	140	16	7.3
SEP									
25...	180	33	52	13	4.2	1.2	150	15	7.4

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
DEC									
10...	.1	4.3	178	.45	.00	.45	--	50	0
MAY									
01...	.1	3.3	165	2.8	.01	2.8	.01	80	10
AUG									
05...	.1	5.6	179	2.4	.01	2.4	.03	300	20
SEP									
25...	.0	3.7	186	2.6	.01	2.6	.03	160	10

K Results based on colony count outside the acceptable range (non-ideal colony count).

01508803 WEST BRANCH TIOUGHNIOGA RIVER AT HOMER, N.Y.

LOCATION.--Lat 42°38'13", long 76°10'37", Cortland County, Hydrologic Unit 02050102, on left bank at downstream side of bridge on Wall Street at Homer and 3.4 mi (5.5 km) upstream from confluence with East Branch. Water-quality sampling site at discharge station.

DRAINAGE AREA.--71.5 mi^2 (185 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1966 to September 1968, October 1972 to current year.

REVISED RECORDS.--WRD NY 1974: 1973 (P).

GAGE.--Water-stage recorder. Datum of gage is 1,114.81 ft (339.794 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1968, water-stage recorder at bridge on Water Street 500 ft (152 m) upstream at same datum.

REMARKS.--Records fair. Slight diversion, maximum daily 0.3 ft^3/s (0.008 m^3/s), from Gage House Pond upstream from station into Onondaga Creek basin (St. Lawrence River basin) for manufacturing purposes by Solvay Process Co.

AVERAGE DISCHARGE.--9 years (1968, 1973-80), 137 ft^3/s (3.880 m^3/s), 26.02 in/yr (661 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,290 ft^3/s (64.9 m^3/s) Mar. 13, 1977, gage height, 8.08 ft (2.463 m); minimum discharge, 9.6 ft^3/s (0.27 m^3/s) Nov. 22, 1966, gage height, 1.98 ft (0.604 m) at site then in use; minimum gage height, 1.14 ft (0.347 m) Sept. 3, Oct. 27, 28, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft^3/s (18.4 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Mar. 22	0130	*1,270	36.0	*6.23	1.899	Mar. 30	0130	651	18.4	4.62	1.408

Minimum discharge, 14 ft^3/s (0.40 m^3/s) Sept. 29, 30, gage height, 1.08 ft (0.329 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	63	121	102	58	37	411	128	52	48	33	21
2	26	120	114	100	58	38	316	125	60	48	38	21
3	30	137	110	94	57	38	303	113	70	48	52	28
4	54	102	105	86	57	38	314	95	64	46	46	20
5	46	92	101	86	56	40	322	101	60	56	38	19
6	140	88	100	77	53	44	277	102	56	83	35	20
7	75	94	100	77	55	47	245	100	70	68	34	19
8	61	87	95	76	50	62	205	96	90	59	30	19
9	59	86	88	74	52	73	272	94	80	56	29	18
10	64	95	86	71	50	69	374	91	73	51	27	19
11	57	83	85	73	47	75	312	91	59	48	27	16
12	55	77	85	80	49	67	285	91	49	48	28	16
13	56	75	87	73	48	62	299	91	44	43	27	15
14	55	77	83	101	47	67	272	92	42	40	28	22
15	52	76	80	118	47	64	283	87	42	37	39	22
16	50	79	76	99	47	61	257	82	82	38	31	19
17	48	76	75	91	45	69	239	79	57	36	29	19
18	48	81	74	87	44	220	224	82	45	35	27	20
19	51	76	71	86	44	181	205	81	39	35	26	18
20	51	73	71	82	44	232	193	77	45	35	26	17
21	49	71	69	77	45	556	182	74	53	38	25	17
22	48	70	69	79	45	905	168	70	45	51	24	19
23	61	71	71	79	49	517	159	63	39	46	24	19
24	97	80	106	70	49	422	150	63	35	37	23	17
25	77	92	182	71	48	457	150	62	33	30	23	16
26	69	158	165	70	45	363	143	58	31	29	21	17
27	68	224	144	69	42	326	136	56	28	30	19	16
28	83	174	130	68	40	324	140	55	30	29	20	15
29	79	152	121	65	37	429	149	53	39	31	20	15
30	70	133	117	63	---	558	138	51	55	33	22	15
31	67	---	109	62	---	465	---	51	---	30	25	---
TOTAL	1872	2962	3090	2506	1408	6906	7123	2554	1567	1342	896	554
MEAN	60.4	98.7	99.7	80.8	48.6	223	237	82.4	52.2	43.3	28.9	18.5
MAX	140	224	182	118	58	905	411	128	90	83	52	28
MIN	26	63	69	62	37	37	136	51	28	29	19	15
CFSM	.85	1.38	1.39	1.13	.68	3.12	3.32	1.15	.73	.61	.40	.26
IN.	.97	1.54	1.61	1.30	.73	3.59	3.71	1.33	.82	.70	.47	.29

CAL YR 1979 TOTAL 47544 MEAN 130 MAX 1580 MIN 21 CFSM 1.82 IN 24.74
WTR YR 1980 TOTAL 32780 MEAN 89.6 MAX 905 MIN 15 CFSM 1.25 IN 17.05

01508803 WEST BRANCH TIOUGHNIOGA RIVER AT HOMER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1970, 1972 to current year.
CHEMICAL DATA: 1957, 1970, 1972 (a); 1973 (c); 1974-80 (b).
NUTRIENT DATA: 1970 (a), 1974-80 (b).
BIOLOGICAL DATA:
Bacteria--1973 (c), 1974-80 (b).

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (FT^3/S)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC 10...	1100	85	390	7.4	3.0	11.4	86	610	K140	36
MAY 01...	1100	128	370	7.6	11.0	8.4	74	94	82	K20
AUG 05...	1145	26	363	7.5	21.5	9.7	--	580	270	130
SEP 25...	1100	15	394	7.4	14.5	6.0	61	460	280	97

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
DEC 10...	160	23	47	11	8.9	1.0	140	17	17
MAY 01...	170	19	48	12	9.0	1.0	150	11	15
AUG 05...	160	23	44	13	10	1.0	140	17	18
SEP 25...	200	52	53	17	13	1.3	150	14	23

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
DEC 10...	.0	4.3	190	1.4	.01	1.4	--	80	10
MAY 01...	.1	2.6	189	1.3	.01	1.3	.01	370	30
AUG 05...	.1	3.8	191	.90	.01	.91	.01	220	30
SEP 25...	.1	3.0	215	1.1	.02	1.1	.02	140	20

K Results based on colony count outside the acceptable range (non-ideal colony count).

01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY

LOCATION.--Lat 42°36'10", long 76°09'35", Cortland County, Hydrologic Unit 02050102, on right bank at east end of Elm Street at Cortland, 0.4 mi (0.6 km) downstream from confluence of East and West Branches. Water-quality sampling site at Cortland Sewage Treatment Plant, 0.4 mi (0.6 km) downstream from discharge station.

DRAINAGE AREA.--292 mi² (756 km²), including 14.0 mi² (36.3 km²), the flow from which may be diverted into De Ruyter Reservoir in Oswego River basin.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 2103: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 1,084.92 ft (330.683 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1939, water-stage recorder at datum 4.00 ft (1.219 m) higher; Oct. 1, 1939 to Sept. 30, 1963, water-stage recorder at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Diurnal fluctuation at low and medium flow caused by powerplants in mills on West Branch. Slight diversion from East Branch for operation of Erie (Barge) Canal. Slight diversion, maximum daily, 0.3 ft³/s (0.008 m³/s), from Gate House Pond upstream from station into Onondaga Creek basin (St. Lawrence River basin) for manufacturing purposes by Solvay Process Co.

AVERAGE DISCHARGE.--42 years (1939-80), 500 ft³/s (14.16 m³/s), 23.25 in/yr (590 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Mar. 5, 1964, gage height, 12.49 ft (3.807 m); minimum, 9.8 ft³/s (0.28 m³/s) Sept. 20, 1939, Sept. 29, 1959; minimum daily, 17 ft³/s (0.48 m³/s) Sept. 26, 27, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,400 ft³/s (125 m³/s) and maximum (*):

Date	Time	Discharge		Gage height	
		(ft³/s)	(m³/s)	(ft)	(m)
Mar. 22	1045	*7,730	219	*10.45	3.185

Minimum discharge, 62 ft³/s (1.76 m³/s) Sept. 29, 30, gage height, 2.64 ft (0.805 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	192	605	395	170	120	1970	432	144	333	129	85
2	83	350	529	360	170	120	1580	441	161	263	221	80
3	83	776	475	310	160	120	1340	437	189	259	292	85
4	105	544	441	280	160	130	1360	359	171	218	236	85
5	102	422	418	270	160	130	1480	346	154	214	178	78
6	368	372	395	250	160	140	1210	333	141	485	154	78
7	275	355	395	240	160	150	994	325	229	342	141	75
8	189	346	368	230	170	210	834	312	359	263	129	75
9	175	316	333	220	160	300	1340	296	346	240	126	73
10	182	355	316	210	160	290	2980	287	316	218	117	73
11	164	337	308	210	150	300	2150	279	267	196	114	73
12	154	296	316	250	150	250	1450	283	229	189	117	71
13	161	279	342	240	150	230	1440	279	203	175	114	71
14	171	287	321	340	150	220	1200	296	182	157	111	75
15	161	287	280	544	140	210	1250	275	189	147	157	75
16	150	300	260	386	140	207	1100	248	544	144	135	73
17	141	287	260	329	140	267	950	229	372	138	120	73
18	138	325	250	312	140	1470	858	240	267	135	111	73
19	141	316	250	308	140	1290	753	244	225	129	105	75
20	135	287	240	280	140	1360	680	225	267	126	102	73
21	135	271	240	240	150	2770	631	210	342	132	99	71
22	126	263	250	250	154	6740	564	196	287	192	93	69
23	135	267	259	230	157	3550	519	182	229	255	90	66
24	287	292	427	220	154	2010	480	175	200	178	88	66
25	292	432	882	210	140	2080	470	167	182	144	88	64
26	236	787	840	210	130	1670	456	157	167	129	83	64
27	218	2340	658	210	130	1320	418	147	157	123	83	64
28	244	1610	554	200	130	1310	432	144	161	120	80	64
29	252	1010	514	200	130	1850	544	138	207	126	80	64
30	225	753	480	190	---	2860	495	135	381	129	80	62
31	207	---	437	180	---	2470	---	132	---	123	88	---
TOTAL	5518	15054	12643	8304	4345	36144	31928	7949	7268	6022	3861	2173
MEAN	178	502	408	268	150	1166	1064	256	242	194	125	72.4
MAX	368	2340	882	544	170	6740	2980	441	544	485	292	85
MIN	83	192	240	180	130	120	418	132	141	120	80	62
CFSM	.61	1.72	1.40	.92	.51	3.99	3.64	.88	.83	.66	.43	.25
IN.	.70	1.92	1.61	1.06	.55	4.60	4.07	1.01	.93	.77	.49	.28

CAL YR 1979 TOTAL 197925 MEAN 542 MAX 11500 MIN 66 CFSM 1.86 IN 25.22
WTR YR 1980 TOTAL 141209 MEAN 386 MAX 6740 MIN 62 CFSM 1.32 IN 17.99

01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957 to current year.
CHEMICAL DATA: 1957 (e), 1970, 1972 (a).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1956 to September 1957, once-daily measurements, unpublished.
pH: October 1956 to September 1957, once-daily measurements, unpublished.
WATER TEMPERATURES: October 1956 to current year.

REMARKS.--Daily water-temperature measurements made at 0900 hours.

COOPERATION.--Water-temperature records furnished by the city of Cortland.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 23.5°C July 22, 1957; minimum daily (except water year 1960), freezing point on many days during winter periods in water years 1957, 1959, 1962, 1967-80.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 19.0°C Aug. 8, 9, Sept. 1; minimum daily, freezing point on several days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

(ONCE DAILY AT 0900)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.5	9.0	5.0	3.5	.0	1.0	4.5	10.5	14.0	14.5	17.0	19.0
2	14.0	9.5	4.0	4.0	.5	3.0	4.5	12.0	15.0	15.0	17.5	17.0
3	14.0	7.0	4.0	3.0	.0	3.0	4.5	13.5	16.0	15.0	18.0	17.0
4	14.5	6.5	4.0	3.0	2.0	4.5	4.5	12.5	15.5	14.5	18.0	17.0
5	14.0	6.0	4.0	2.5	1.5	4.5	5.0	12.5	13.0	16.0	18.0	15.0
6	13.0	6.5	4.0	2.5	2.0	4.5	5.0	15.5	12.5	15.5	17.5	14.5
7	12.0	7.0	3.5	2.0	2.5	5.5	7.0	11.0	14.0	15.5	17.0	16.0
8	12.0	7.0	5.0	3.0	2.0	5.0	8.5	11.5	15.0	15.5	19.0	16.0
9	12.0	7.5	3.0	3.0	2.0	4.0	9.5	9.5	11.5	15.5	19.0	14.5
10	9.5	9.0	4.0	2.0	2.0	3.0	8.5	9.5	11.0	15.5	16.0	16.0
11	10.0	8.0	5.5	2.5	2.5	3.0	8.5	9.0	11.0	15.0	16.0	14.5
12	10.0	7.0	5.0	2.0	3.0	2.5	7.5	12.5	12.0	15.5	18.0	14.0
13	10.0	7.0	5.5	2.0	3.0	3.0	7.5	12.0	11.5	15.0	16.0	15.0
14	10.5	7.0	4.5	3.5	3.5	3.5	7.5	12.0	15.0	15.5	16.0	16.0
15	10.0	6.5	3.0	2.5	3.0	3.5	8.0	11.5	15.0	15.5	16.0	14.0
16	11.0	4.5	4.0	3.0	3.0	5.0	7.0	11.5	15.5	16.0	16.0	13.0
17	10.5	5.0	1.0	3.5	3.5	5.0	5.0	11.5	14.5	16.0	15.0	13.5
18	11.0	6.5	3.0	3.5	3.5	1.5	5.0	12.0	14.0	16.5	15.0	14.5
19	11.0	6.5	.0	3.5	4.0	3.0	7.5	12.0	14.0	15.5	15.0	14.0
20	13.0	6.5	1.0	3.0	4.0	3.5	9.0	12.0	14.0	15.0	15.0	14.0
21	13.0	8.5	1.0	3.0	4.0	4.5	9.5	13.0	13.5	16.0	16.0	14.0
22	14.0	8.0	2.0	3.0	4.0	2.0	9.0	14.0	14.0	18.0	16.0	17.5
23	14.0	8.5	4.5	3.0	4.5	1.0	9.0	14.0	15.0	17.0	16.0	15.5
24	12.0	11.0	5.0	2.0	5.0	2.5	10.0	14.0	15.0	15.5	16.0	13.0
25	9.0	9.5	5.5	1.5	5.0	2.0	10.5	14.5	16.5	16.0	16.5	13.0
26	8.0	11.0	5.0	2.0	4.0	1.5	11.5	13.0	16.5	15.5	16.5	13.0
27	7.0	9.0	2.5	3.0	3.0	3.0	9.5	13.0	16.5	17.0	16.5	13.0
28	6.0	7.0	3.0	4.0	.0	5.5	9.5	14.0	16.5	16.5	16.5	12.0
29	8.0	6.0	3.0	3.5	.0	4.5	9.0	14.0	14.5	16.0	17.0	12.0
30	8.0	5.0	3.5	.5	---	4.0	10.0	13.5	15.0	15.5	18.0	14.0
31	7.5	---	3.0	.5	---	4.0	---	14.0	---	16.0	17.0	---
MEAN	11.0	7.5	3.5	2.5	2.5	3.5	7.5	12.5	14.0	15.5	16.5	14.5

WTR YR 1980 MEAN 9.5 MAX 19.0 MIN .0

01509150 GRIDLEY CREEK ABOVE EAST VIRGIL, NY

LOCATION.--Lat 42°30'04", long 76°07'38", Cortland County, Hydrologic Unit 02050102, on right bank 100 ft (30 m) downstream from bridge on Tone Road, 250 ft (75 m) south of State Highway 90, 1.6 mi (2.6 km) northwest of East Virgil, 3.2 mi (5.1 km) northwest of Messengerville, and 3.5 mi (5.6 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--10.4 mi² (26.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge measurements, seepage investigation, water year 1974. July 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,270.00 ft (387.096 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--6 years, 23.5 ft³/s (0.666 m³/s), 30.69 in/yr (780 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,080 ft³/s (116 m³/s) Oct. 9, 1976; maximum gage height, 9.33 ft (3.844 m) Sept. 18, 1977; minimum discharge, 0.9 ft³/s (0.025 m³/s) Aug. 8, 1975, gage height, 4.74 ft (1.445 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 26	1545	*378	10.7	*8.47	2.582

Minimum daily discharge, 1.5 ft³/s (0.04 m³/s) Feb. 29, Mar. 1, Aug. 1, Sept. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	5.8	16	13	3.4	1.5	40	19	3.1	39	1.5	2.9
2	2.0	35	13	12	3.0	1.6	26	18	3.2	19	21	3.4
3	2.2	29	12	9.5	2.8	1.6	22	32	6.0	11	43	4.0
4	2.3	18	12	7.0	3.4	1.7	22	25	4.9	8.4	21	2.6
5	3.3	15	11	6.4	4.0	2.1	28	20	4.0	31	12	2.3
6	19	13	11	6.0	3.0	4.0	23	17	4.2	22	8.5	2.0
7	5.1	15	11	5.8	2.8	5.0	20	15	6.0	15	6.9	1.8
8	4.5	14	9.5	5.6	2.6	26	19	14	12	11	6.0	1.7
9	7.1	12	7.8	4.8	2.4	22	46	13	10	7.8	5.4	1.7
10	5.8	14	8.2	4.2	3.4	14	80	12	8.6	6.5	4.5	1.8
11	4.5	12	8.2	6.0	3.2	15	50	11	8.0	5.4	5.1	1.6
12	4.5	11	8.2	6.4	3.0	7.2	36	13	6.8	4.5	7.0	1.5
13	8.4	10	9.2	4.4	3.0	6.0	27	16	6.0	3.6	7.6	1.5
14	6.9	12	7.1	12	2.6	6.4	22	14	5.2	2.9	5.1	5.4
15	6.1	11	6.6	13	2.5	8.0	34	12	7.8	2.6	27	6.3
16	5.3	11	6.4	9.2	2.4	7.0	27	10	8.6	2.4	12	3.5
17	4.8	10	6.0	8.4	2.4	30	22	8.8	8.0	2.3	8.7	3.6
18	4.8	10	5.4	8.7	3.2	130	20	8.0	5.4	2.0	7.5	4.5
19	4.5	9.5	4.8	8.4	3.0	46	18	8.6	7.8	1.7	7.1	3.0
20	4.2	9.2	5.3	6.9	3.2	50	16	7.4	9.8	1.7	6.5	2.7
21	3.9	9.0	5.3	6.3	3.0	90	15	6.6	8.6	24	5.6	2.5
22	3.6	9.7	6.5	6.2	4.0	190	14	6.0	6.8	18	4.8	2.4
23	3.6	11	9.5	6.0	5.8	70	12	5.6	5.4	8.2	4.2	2.6
24	11	16	30	5.2	6.6	52	11	5.0	4.8	5.1	3.6	2.4
25	8.7	21	60	4.4	5.0	74	10	4.6	4.0	3.6	3.0	2.1
26	6.9	98	38	4.2	2.2	39	13	4.2	3.3	2.7	2.7	2.7
27	6.5	46	30	5.2	2.0	44	11	3.8	3.2	2.4	2.5	2.4
28	10	31	23	5.2	2.0	51	16	3.6	10	1.9	2.3	2.3
29	8.4	25	21	4.4	1.5	92	40	3.3	38	2.0	2.5	2.1
30	6.9	19	19	3.6	---	60	24	3.1	50	2.1	4.8	2.1
31	6.3	---	16	3.8	---	52	---	2.9	---	1.6	5.0	---
TOTAL	183.1	562.2	437.0	212.2	91.4	1199.1	764	342.5	269.5	271.4	264.4	81.4
MEAN	5.91	18.7	14.1	6.85	3.15	38.7	25.5	11.0	8.98	8.75	8.53	2.71
MAX	19	98	60	13	6.6	190	80	32	50	39	43	6.3
MIN	2.0	5.8	4.8	3.6	1.5	1.5	10	2.9	3.1	1.6	1.5	1.5
CFSM	.57	1.81	1.36	.66	.30	3.74	2.46	1.06	.87	.85	.82	.26
IN.	.66	2.02	1.57	.76	.33	4.31	2.74	1.23	.97	.97	.95	.29

CAL YR 1979 TOTAL 7638.5 MEAN 20.9 MAX 1000 MIN 1.1 CFSM 2.02 IN 27.43
WTR YR 1980 TOTAL 4678.2 MEAN 12.8 MAX 190 MIN 1.5 CFSM 1.24 IN 16.80

Note.--No gage-height record Jan.24 to July 8.

01509150 GRIDLEY CREEK ABOVE EAST VIRGIL, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-80 (d).
NUTRIENT DATA: 1975-80 (d).
BIOLOGICAL DATA:
Bacteria--1975-80 (d).

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 17...	1400	4.5	235	7.7	10.0	10.1	92	K90	K40	K40
NOV 14...	1400	12	190	7.2	5.5	10.8	88	120	44	46
DEC 10...	0830	8.4	210	7.7	3.0	11.8	89	72	33	21
JAN 24...	1300	6.0	225	7.3	.0	13.2	94	44	K28	290
FEB 26...	1400	3.0	300	7.3	.0	--	--	K8	K4	K36
MAR 25...	1400	62	105	7.0	2.5	12.2	93	56	K26	120
MAY 01...	0830	18	138	7.6	8.0	9.5	84	46	K32	54
JUN 05...	1400	.50	--	8.5	16.0	9.7	100	210	58	2300
JUL 08...	0900	9.0	210	7.4	16.0	9.0	92	300	460	160
AUG 05...	0930	12	176	7.2	16.5	9.4	--	700	220	300
28...	1000	2.4	301	8.1	14.5	11.1	--	260	K19	K15
SEP 25...	0930	1.8	305	7.7	11.0	7.0	65	70	K18	34

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 17...	89	17	27	5.3	6.7	1.0	72	15
NOV 14...	61	17	19	3.4	4.6	.9	44	15
DEC 10...	79	24	24	4.7	6.0	.9	55	15
JAN 24...	96	18	29	5.8	6.3	.9	78	15
FEB 26...	120	--	36	6.8	8.6	1.1	--	17
MAR 25...	34	--	10	2.1	4.2	.8	--	10
MAY 01...	56	16	17	3.4	4.3	.8	40	11
JUN 05...	120	25	34	7.3	8.1	.9	90	16
JUL 08...	85	13	26	4.8	6.0	1.0	72	14
AUG 05...	76	--	23	4.5	5.6	1.0	--	14
28...	140	27	41	8.5	7.6	1.1	110	16
SEP 25...	140	26	42	7.6	8.8	1.2	110	11

K Results based on colony count outside the acceptable range (non-ideal colony count).

01509150 GRIDLEY CREEK ABOVE EAST VIRGIL, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 to SEPTEMBER 1980

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT										
17...	12	.1	4.0	114	.42	.01	.43	--	260	10
NOV										
14...	11	.0	3.8	84	.46	.00	.46	--	100	10
DEC										
10...	12	.0	5.1	101	.79	.00	.79	--	120	10
JAN										
24...	12	.0	5.2	121	.84	.01	.85	--	90	10
FEB										
26...	24	.1	5.0	--	1.1	.01	1.1	--	90	10
MAR										
25...	6.6	.1	3.8	--	.60	.01	.61	--	890	20
MAY										
01...	7.1	.1	3.7	71	.37	.01	.38	.01	120	10
JUN										
05...	24	.1	2.3	147	.29	.01	.30	.03	80	10
JUL										
08...	12	.1	4.3	111	.49	.00	.49	.01	250	0
AUG										
05...	9.1	.1	6.1	--	.37	.00	.37	--	210	10
28...	16	.1	3.2	160	.32	.00	.32	.02	90	10
SEP										
25...	22	.0	6.0	165	.74	.00	.74	.02	130	10

01510000 OTSELIC RIVER AT CINCINNATUS, NY

LOCATION.--Lat 42°32'28", long 75°53'58", Cortland County, Hydrologic Unit 02050102, on right bank 150 ft (46 m) upstream from Mead Brook, and 300 ft (91 m) downstream from bridge on County Highway 159 at Cincinnatus.

DRAINAGE AREA.--147 mi^2 (381 km^2).

PERIOD OF RECORD.--June 1938 to September 1964, October 1969 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,031.67 ft (314.328 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--37 years (1939-64, 1970-80), 273 ft^3/s (7.731 m^3/s), 25.22 in/yr (641 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,390 ft^3/s (238 m^3/s) Dec. 30, 1942; maximum gage height, 10.68 ft (3.255 m) Apr. 4, 1950; minimum discharge, 3.8 ft^3/s (0.11 m^3/s) Sepc. 25, 1939; minimum gage height, 0.24 ft (0.073 m) Sept. 2, 1979 (result of channel clearance).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft^3/s (70.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	0315	*5,380	152	*9.03	2.752	Apr. 9	2130	2,840	80.4	6.65	2.027

Minimum discharge, 13 ft^3/s (0.37 m^3/s) Sept. 13, 14, gage height, 0.29 ft (0.088 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	70	298	170	82	56	683	202	35	177	35	29
2	15	113	260	170	78	56	564	188	39	132	53	28
3	16	280	227	150	76	56	465	183	46	130	98	28
4	19	209	209	130	74	56	549	163	47	109	78	26
5	21	178	194	130	74	56	570	149	41	107	57	26
6	40	161	186	130	74	64	432	139	38	212	44	22
7	52	153	184	120	72	68	360	131	60	146	37	19
8	37	151	168	110	70	130	322	125	101	114	34	17
9	37	140	151	110	70	180	1170	116	104	104	32	17
10	41	157	148	100	68	150	1800	110	98	91	31	17
11	36	155	146	100	66	160	1000	106	75	77	31	16
12	31	142	157	140	66	120	720	107	61	69	33	15
13	48	133	168	132	66	110	680	114	52	62	31	14
14	57	137	150	190	64	100	580	123	47	54	29	15
15	53	139	139	306	64	100	660	109	45	50	40	17
16	50	144	144	188	64	110	547	96	120	47	38	16
17	43	139	135	159	62	160	462	83	91	46	32	18
18	40	157	130	149	62	1490	416	83	63	45	30	28
19	36	153	120	148	62	803	368	92	53	41	30	23
20	35	140	120	137	62	827	325	84	83	38	28	19
21	32	135	120	118	64	2180	296	71	114	39	27	17
22	30	132	120	110	68	3910	258	64	90	61	25	17
23	30	130	139	110	68	1250	232	57	65	77	24	16
24	79	151	248	100	70	789	213	52	56	56	21	16
25	88	239	559	100	68	1000	198	48	51	44	20	17
26	74	885	445	100	66	658	183	44	48	39	19	20
27	67	1400	339	96	64	553	169	42	43	37	18	17
28	68	663	280	92	60	587	189	40	43	35	17	17
29	82	465	260	90	58	1040	290	38	85	34	18	16
30	99	365	243	88	---	1300	243	37	229	35	35	15
31	84	---	216	84	---	924	---	36	---	34	41	---
TOTAL	1460	7616	6403	4057	1962	19043	14944	3032	2123	2342	1086	578
MEAN	47.1	254	207	131	67.7	614	498	97.8	70.8	75.5	35.0	19.3
MAX	99	1400	559	306	82	3910	1800	202	229	212	98	29
MIN	15	70	120	84	58	56	169	36	35	34	17	14
CFSM	.32	1.73	1.41	.89	.46	4.18	3.39	.67	.48	.51	.24	.13
IN.	.37	1.93	1.62	1.03	.50	4.82	3.78	.77	.54	.59	.27	.15

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CAL YR 1979   TOTAL  99823   MEAN 273   MAX  5510   MIN 10   CFSM 1.86   IN 25.26
WTR YR 1980   TOTAL  64646   MEAN 177   MAX  3910   MIN 14   CFSM 1.20   IN 16.36
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01511000 WHITNEY POINT LAKE AT WHITNEY POINT, NY

LOCATION.--Lat 42°20'34", long 75°57'57", Broome County, Hydrologic Unit 02050102, on left bank at control-gate structure for Whitney Point Dam on Otselic River, 0.3 mi (0.5 km) upstream from spillway, 0.9 mi (1.4 km) upstream from mouth, and 1.0 mi (1.6 km) north of Whitney Point.

DRAINAGE AREA.--257 mi^2 (666 km^2).

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to October 1970, published as "Whitney Point Reservoir at Whitney Point."

REMARKS.--Lake is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in 1942 for flood control; first used for flood regulation on Mar. 9, 1942. Usable capacity, 86,440 acre-ft (107 hm^3) between elevations 950.0 ft or 289.56 m (sill of gates) and 1,010.0 ft or 307.85 m (crest of spillway). Dead storage, 28 acre-ft (34,500 m^3). Figures given herein represent total contents. Discharge is controlled by operation of three gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,005.0 ft (306.32 m) Mar. 23, 1948, contents, 71,440 acre-ft (88.1 hm^3); minimum, 950.4 ft (289.68 m) Sept. 2-4, 1953, contents, 36 acre-ft (44,400 m^3).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 982.32 ft (299.411 m) Mar. 23, contents, 25,830 acre-ft (31.8 hm^3); minimum, 965.77 ft (294.367 m) Jan. 21, contents, 4,995 acre-ft (6.16 hm^3).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1937)

960.0	1,250	980.0	22,240
965.0	4,260	985.0	30,200
970.0	9,270	990.0	38,980
975.0	15,290	1,000.0	59,220

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	973.09	972.93	973.10	966.12	965.87	965.92	974.65	965.95	972.20	973.20	972.94	973.13
2	973.05	973.11	972.94	965.91	965.85	965.91	972.62	965.99	972.28	973.02	972.99	973.08
3	973.01	973.65	972.61	965.86	965.86	965.92	970.41	966.06	972.39	973.09	973.30	973.11
4	973.05	973.35	971.68	965.88	965.86	965.95	968.24	965.97	972.49	973.17	972.98	973.13
5	973.07	973.14	970.67	965.91	965.88	965.98	967.11	965.98	972.58	973.22	972.87	973.15
6	973.14	973.05	969.66	965.96	965.90	966.02	966.37	966.26	972.64	973.34	972.95	973.20
7	973.22	973.08	968.67	965.95	965.91	966.08	966.18	966.67	972.77	973.20	973.02	973.17
8	973.27	973.02	967.71	965.94	965.91	966.39	966.11	967.07	972.96	973.11	973.05	973.13
9	973.27	973.03	966.76	965.92	965.90	966.32	967.06	967.43	973.20	973.04	973.07	973.06
10	973.24	973.10	966.33	965.87	965.90	965.94	974.75	967.73	973.37	973.02	973.06	973.09
11	973.20	973.23	966.05	965.81	965.88	966.09	976.60	967.94	973.41	973.03	973.07	973.09
12	973.14	973.25	965.98	965.97	965.90	966.13	974.79	968.37	973.41	973.06	973.07	973.10
13	973.09	973.17	966.19	966.11	966.00	965.92	972.68	968.69	973.31	973.05	973.07	973.11
14	973.06	973.07	966.41	966.19	966.10	965.82	970.38	969.09	973.17	973.03	973.06	973.13
15	973.05	972.98	966.38	966.30	966.16	966.01	968.51	969.46	973.03	973.06	973.10	973.12
16	973.05	972.98	966.28	965.99	966.19	966.03	967.03	969.75	973.00	973.13	973.17	973.04
17	973.04	972.99	966.19	965.98	966.18	966.07	966.59	970.00	973.10	973.16	973.10	973.02
18	973.02	973.01	966.03	965.98	966.10	968.01	966.24	970.21	973.15	973.13	973.02	973.07
19	973.00	973.10	965.95	965.95	966.01	969.74	966.13	970.48	973.14	973.10	973.01	973.08
20	973.01	973.18	965.99	965.90	965.95	968.60	966.23	970.71	973.12	973.04	973.02	973.04
21	973.03	973.22	966.07	965.80	965.96	968.48	966.26	970.92	973.18	973.01	973.02	973.00
22	973.07	973.23	966.11	965.92	966.00	975.73	966.16	971.11	973.17	973.07	973.02	972.95
23	973.10	973.24	966.20	966.11	966.02	981.83	965.98	971.27	973.12	973.10	973.02	972.95
24	973.15	973.25	966.37	966.15	966.02	981.09	965.99	971.42	973.09	973.12	973.02	972.95
25	973.27	973.45	966.65	966.10	966.04	980.00	965.98	971.56	973.09	973.03	973.02	972.95
26	973.34	973.33	966.27	966.08	966.05	978.36	966.00	971.69	973.09	973.02	973.01	973.00
27	973.33	975.94	966.06	966.08	966.03	975.89	965.99	971.75	973.08	972.96	973.01	973.03
28	973.15	976.38	966.10	966.06	965.99	973.40	966.00	971.85	973.06	972.91	973.01	973.05
29	972.94	974.48	966.07	965.99	965.97	971.59	966.18	971.95	973.13	972.91	973.02	973.07
30	972.83	973.16	966.31	965.96	---	973.85	966.19	971.98	973.38	972.91	973.05	973.07
31	972.84	---	966.29	965.92	---	975.33	---	972.08	---	972.93	973.12	---
MEAN	973.10	973.40	967.42	965.99	965.98	969.82	968.31	969.27	973.00	973.07	973.04	973.07
MAX	973.34	976.38	973.10	966.30	966.19	981.83	976.60	972.08	973.41	973.34	973.30	973.20
MIN	972.83	972.93	965.95	965.80	965.85	965.91	965.98	965.95	972.20	972.91	972.87	972.95
*	12,529	12,850	5,442	5,120	5,168	15,682	5,254	11,665	13,193	12,601	12,863	12,774
**	-4.8	+5.4	-120.5	-5.2	+0.8	+171.0	-175.2	+104.3	+25.7	-9.6	+4.3	-1.5

CAL YR 1979 MEAN 971.20 MAX 997.74 MIN 965.40 ** +0.3
WTR YR 1980 MEAN 970.47 MAX 981.83 MIN 965.80 ** -0.1

* Contents, in acre-feet, at end of month.
** Change in contents, equivalent in cubic feet per second.

01512500 CHENANGO RIVER NEAR CHENANGO FORKS, NY

LOCATION.--Lat 42°13'05", long 75°50'55", Broome County, Hydrologic Unit 02050102, on left bank in Chenango Valley State Park, and 1.2 mi (1.9 km) downstream from Tioughnioga River and village of Chenango Forks.

DRAINAGE AREA.--1,483 mi² (3,841 km²).

PERIOD OF RECORD.--November 1912 to current year.

GAGE.--Water-stage recorder. Datum of gage is 871.628 ft (265.672 m) National Geodetic Vertical Datum of 1929. Nov. 11, 1912 to Oct. 1, 1914, nonrecording gage and Oct. 2, 1914 to Aug. 2, 1936, water-stage recorder at site 300 ft (91 m) upstream at same datum.

REMARKS.--Records fair except those for winter periods, which are poor. Since March 1942, flood flows partly regulated by Whitney Point Lake (see station 01511000). Slight diversion from upstream tributaries for operation of Erie (Barge) Canal.

AVERAGE DISCHARGE.--67 years (1914-80), 2,433 ft³/s (68.90 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 96,000 ft³/s (2,720 m³/s) July 8, 1935, gage height, 20.3 ft (6.19 m), from floodmarks, from rating curve extended above 32,000 ft³/s (906 m³/s) on basis of slope-area measurement of peak flow; minimum, 84 ft³/s (2.38 m³/s) Sept. 19, 25, 1939, gage height, 2.24 ft (0.683 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 18,000 ft³/s (510 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 22	0600	*18,400	521	*9.55	2.911

Minimum discharge, 216 ft³/s (6.12 m³/s) Sept. 25, gage height, 2.56 ft (0.780 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	397	664	3150	1900	580	410	10400	2600	456	3660	438	456
2	372	1020	2750	1700	560	410	8760	2210	482	2080	500	430
3	364	3890	2600	1500	540	410	7000	2470	537	1520	1350	364
4	388	3460	2670	1300	520	420	7200	2040	602	1280	1480	364
5	405	2300	2520	1200	500	430	7400	1690	555	1110	876	364
6	781	1820	2390	1100	500	480	6000	1430	509	2690	641	388
7	1030	1670	2320	1000	500	700	5200	1270	574	2230	574	364
8	855	1730	2220	920	540	1100	4500	1190	770	1490	518	305
9	798	1460	1930	860	520	2000	7000	1130	1010	1270	482	298
10	835	1570	1570	820	500	1700	14000	1090	1110	1090	447	278
11	757	1660	1480	840	480	1600	11100	1050	993	945	438	258
12	696	1510	1360	920	470	1300	8390	1050	882	899	447	240
13	723	1380	1460	960	460	1100	7580	1100	833	836	473	258
14	773	1380	1540	940	450	980	6860	1310	750	720	456	252
15	801	1360	1450	2820	440	900	7580	1210	680	631	546	380
16	769	1330	1370	2380	440	1000	6540	1080	770	574	641	291
17	709	1300	1300	1690	430	1200	4820	955	1150	583	546	265
18	654	1330	1300	1540	430	7000	4190	870	924	546	456	327
19	594	1370	1200	1460	430	9170	3540	910	810	546	405	356
20	543	1280	1200	1370	430	7840	3120	912	816	518	397	356
21	517	1200	1200	1180	440	10400	2910	861	1030	473	388	349
22	499	1160	1190	1070	450	17600	2630	803	1070	865	372	320
23	484	1160	1210	1000	460	15300	2340	755	931	824	364	246
24	782	1190	1910	920	470	11900	2070	680	760	843	349	271
25	1170	2420	4590	860	460	11600	1940	636	650	700	342	246
26	1120	5200	5650	780	440	10100	1840	555	602	583	312	320
27	1030	10500	3720	720	430	8330	1720	528	555	528	291	334
28	1000	8420	3000	680	420	7980	1820	509	500	482	285	298
29	1050	6420	2580	660	410	9570	2820	482	854	465	305	285
30	872	4250	2360	640	---	11800	3190	464	5430	482	342	271
31	718	---	2100	620	---	11500	---	456	---	438	388	---
TOTAL	22486	75404	67290	36350	13700	166230	164460	34296	27595	31901	15849	9534
MEAN	725	2513	2171	1173	472	5362	5482	1106	920	1029	511	318
MAX	1170	10500	5650	2820	580	17600	14000	2600	5430	3660	1480	456
MIN	364	664	1190	620	410	410	1720	456	456	438	285	240

CAL YR 1979 TOTAL 964613 MEAN 2643 MAX 37200 MIN 210
WTR YR 1980 TOTAL 665095 MEAN 1817 MAX 17600 MIN 240

01513110 SUSQUEHANNA RIVER AT JOHNSON CITY, NY

LOCATION.--Lat 42°06'37", long 75°58'30", Broome County, Hydrologic Unit 02050103, at intake of the New York State Electric and Gas Corp., Goudey Station, at Johnson City, 100 ft (30 m) upstream from Little Choconut Creek, 0.5 mi (0.8 km) downstream from C.F.J. Memorial Bridge, 3.5 mi (5.6 km) downstream from Chenango River and 4.8 mi (7.7 km) upstream from discontinued discharge station (01513500) at Vestal.

DRAINAGE AREA.--3,891 mi^2 (10,078 km^2).

PERIOD OF RECORD.--Water years 1956 to current year. Prior to October 1960, published as 01513500, "at Johnson City", and prior to October 1967, published as 01513500, "at Vestal"; however, all water-temperature records were collected at present site.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1955 to current year.

REMARKS.--Daily water-temperature measurements made at 0800 hours. During winter periods water is at times recirculated from inside the plant through the intake to prevent icing conditions, thus resulting in reported water temperatures that are slightly above actual river temperatures.

COOPERATION.--Water-temperature records furnished by the New York State Electric and Gas Corp.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 4, 1979, July 21, 1980; minimum daily, freezing point on many days during winter periods, except 1967, 1976, and 1978-80.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 29.0°C July 21; minimum daily, 1.0°C Jan. 31 and Feb. 1.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 to SEPTEMBER 1980
(ONCE DAILY AT 0800)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	9.0	3.0	3.0	1.0	2.0	5.0	13.0	22.0	19.0	26.0	26.0
2	18.0	10.0	3.0	2.0	2.0	7.0	6.0	14.0	23.0	22.0	26.0	27.0
3	18.0	9.0	2.0	2.0	2.0	2.0	6.0	16.0	23.0	20.0	25.0	27.0
4	18.0	8.0	3.0	2.0	2.0	2.0	8.0	17.0	22.0	22.0	24.0	27.0
5	18.0	8.0	3.0	2.0	2.0	2.0	7.0	17.0	20.0	23.0	25.0	27.0
6	19.0	7.0	3.0	2.0	2.0	2.0	7.0	17.0	20.0	22.0	26.0	27.0
7	17.0	8.0	4.0	2.0	2.0	2.0	8.0	16.0	20.0	21.0	26.0	27.0
8	13.0	7.0	4.0	3.0	1.0	2.0	10.0	16.0	19.0	21.0	27.0	24.0
9	13.0	7.0	2.0	2.0	2.0	2.0	10.0	14.0	16.0	22.0	27.0	22.0
10	11.0	8.0	3.0	2.0	2.0	1.0	10.0	14.0	15.0	23.0	27.0	21.0
11	14.0	8.0	3.0	2.0	2.0	2.0	10.0	14.0	15.0	24.0	26.0	20.0
12	11.0	8.0	5.0	2.0	2.0	2.0	9.0	15.0	17.0	24.0	27.0	20.0
13	10.0	7.0	9.0	2.0	2.0	2.0	10.0	16.0	19.0	24.0	25.0	20.0
14	10.0	7.0	4.0	2.0	2.0	2.0	9.0	16.0	21.0	24.0	24.0	21.0
15	10.0	6.0	2.0	2.0	2.0	2.0	9.0	15.0	23.0	25.0	24.0	21.0
16	9.0	5.0	2.0	2.0	2.0	3.0	8.0	15.0	22.0	25.0	23.0	20.0
17	10.0	5.0	2.0	2.0	2.0	1.0	7.0	16.0	21.0	26.0	21.0	21.0
18	11.0	5.0	2.0	3.0	2.0	4.0	7.0	17.0	21.0	27.0	22.0	21.0
19	12.0	6.0	2.0	3.0	2.0	2.0	8.0	17.0	22.0	27.0	21.0	20.0
20	18.0	7.0	2.0	2.0	2.0	3.0	10.0	18.0	20.0	28.0	21.0	21.0
21	18.0	7.0	2.0	2.0	2.0	1.0	11.0	19.0	20.0	29.0	21.0	21.0
22	23.0	8.0	2.0	2.0	2.0	3.0	12.0	20.0	22.0	27.0	21.0	24.0
23	18.0	9.0	2.0	2.0	2.0	6.0	12.0	21.0	23.0	25.0	22.0	24.0
24	15.0	10.0	3.0	2.0	2.0	4.0	13.0	22.0	24.0	25.0	24.0	24.0
25	12.0	10.0	5.0	2.0	2.0	4.0	14.0	21.0	26.0	25.0	24.0	22.0
26	10.0	11.0	4.0	5.0	2.0	3.0	14.0	21.0	26.0	26.0	27.0	20.0
27	9.0	10.0	3.0	2.0	2.0	3.0	13.0	20.0	27.0	27.0	27.0	18.0
28	8.0	8.0	3.0	2.0	2.0	4.0	12.0	19.0	25.0	26.0	26.0	15.0
29	7.0	7.0	4.0	2.0	2.0	5.0	11.0	21.0	23.0	25.0	26.0	15.0
30	8.0	6.0	6.0	2.0	---	4.0	12.0	23.0	21.0	24.0	27.0	18.0
31	8.0	---	3.0	1.0	---	5.0	---	22.0	---	25.0	24.0	---
MEAN	13.5	7.5	3.0	2.0	2.0	3.0	9.5	17.5	21.5	24.5	24.5	22.0

WTR YR 1980 MEAN 12.5 MAX 29.0 MIN 1.0

01515000 SUSQUEHANNA RIVER NEAR WAVERLY, NY

LOCATION.--Lat 41°59'05", long 76°30'05", Bradford County, Pa., Hydrologic Unit 02050103, on left bank 0.2 mi (0.3 km) upstream from Cayuta Creek, 0.4 mi (0.6 km) upstream from bridge on East Lockhart Street at Sayre, Pa., 1 mi (2 km) downstream from New York-Pennsylvania State line, and 2 mi (3 km) southeast of Waverly.

DRAINAGE AREA.--4,773 mi^2 (12,362 km^2).

PERIOD OF RECORD.--February 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 743.96 ft (226.759 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to November 1939, at datum 1.0 ft (0.30 m) higher.

REMARKS.--Records good except those for winter periods, which are poor. Minor regulation by upstream lakes and reservoirs. Slight diversion from upstream tributaries for operation of Erie (Barge) Canal.

AVERAGE DISCHARGE.--43 years, 7,640 ft^3/s (216.4 m^3/s), 21.74 in/yr (552 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 121,000 ft^3/s (3,430 m^3/s) June 23, 1972, gage height, 21.24 ft (6.474 m); minimum daily, 237 ft^3/s (6.71 m^3/s) Sept. 22, 23, 1964; minimum gage height, 0.52 ft (0.158 m) Sept. 24, 25, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of about 21.4 ft (6.52 m), from flood profile (discharge, 128,000 ft^3/s or 3,620 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 52,000 ft^3/s (1,470 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	1400	*56,900	1,611	*13.24	4.036

Minimum discharge, 581 ft^3/s (16.4 m^3/s) Sept. 25, gage height, 0.89 ft (0.271 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1270	2300	12000	6910	1700	1200	41200	15000	1590	10100	1150	724
2	1330	2700	10100	6230	1600	1200	32800	12000	1570	9650	1090	792
3	1590	12000	8840	5400	1700	1200	25500	11200	1570	6230	1170	808
4	2020	24000	8200	4800	1700	1200	22300	9860	1620	4460	2040	789
5	2680	17000	7930	3900	1600	1200	23100	8350	1610	3750	2830	791
6	4200	9600	7510	3400	1700	1400	22200	7310	1600	3970	2300	1030
7	7400	7480	7150	3200	1800	1700	18400	6380	1570	5330	1930	901
8	7000	6880	6660	2900	1800	5200	15300	5720	1550	6230	1580	858
9	5600	6290	6160	2800	1700	12400	18300	5240	1780	4800	1270	834
10	6000	5730	5480	2700	1600	14600	40100	4860	2200	3660	1200	754
11	5400	5900	4870	2600	1500	10900	32300	4510	2580	3150	1080	698
12	4400	5900	4550	2900	1500	7800	25100	4260	2520	2990	1060	649
13	3600	5430	4410	3300	1400	5800	20300	4160	2270	2650	990	633
14	3400	5010	4620	3200	1400	4200	18400	5040	2080	2330	969	622
15	3400	4900	4700	5600	1300	3200	20700	5960	1880	2070	1100	602
16	3200	4720	4400	6400	1300	3300	20300	5390	2050	1810	1130	617
17	2900	4640	4000	6200	1300	4000	17200	4630	1860	1650	1240	670
18	2700	4450	3600	5320	1300	17800	14300	4010	2270	1530	1210	667
19	2500	4320	3400	4630	1400	31000	12400	3650	2390	1440	1080	666
20	2200	4230	3200	4260	1400	26300	11000	3560	2300	1360	962	670
21	2100	3990	3300	3870	1400	26800	9860	3450	2030	1310	894	662
22	1900	3760	3400	3610	1400	52200	9060	3250	2090	1320	843	667
23	1900	3670	3600	3240	1400	47100	8230	3000	2190	1590	800	656
24	2200	3670	4700	3000	1400	42900	7440	2740	2150	1620	767	615
25	3700	4670	10400	2700	1300	42000	6790	2500	1900	1580	736	595
26	5000	10600	15300	2500	1300	35200	6380	2240	1700	1490	690	637
27	4100	25400	13800	2300	1300	28300	6060	2040	1550	1380	674	679
28	3300	25600	11000	2200	1300	23600	8290	1910	1380	1240	660	683
29	2900	22000	9270	2100	1200	26500	15500	1800	1330	1150	634	684
30	2700	16100	8160	1900	---	38000	15500	1710	2620	1160	627	758
31	2500	---	7530	1700	---	40900	---	1620	---	1190	658	---
TOTAL	105090	262940	212240	115770	42700	559100	544310	157350	57800	94190	35364	21411
MEAN	3390	8765	6846	3735	1472	18040	18140	5076	1927	3038	1141	714
MAX	7400	25600	15300	6910	1800	52200	41200	15000	2620	10100	2830	1030
MIN	1270	2300	3200	1700	1200	1200	6060	1620	1330	1150	627	595
CFSM	.71	1.84	1.43	.78	.31	3.78	3.80	1.06	.40	.64	.24	.15
IN.	.82	2.05	1.65	.90	.33	4.36	4.24	1.23	.45	.73	.28	.17

CAL YR 1979 TOTAL 3168265 MEAN 8680 MAX 104000 MIN 626 CFSM 1.82 IN 24.69
WTR YR 1980 TOTAL 2208265 MEAN 6034 MAX 52200 MIN 595 CFSM 1.26 IN 17.21

01520500 TIOGA RIVER AT LINDLEY, NY

LOCATION.--Lat 42°01'44", long 77°07'57", Steuben County, Hydrologic Unit 02050104, on left bank just downstream from bridge on County Highway 120 at Lindley, and 6 mi (10 km) upstream from Canisteo River. Water-quality sampling site at discharge station.

DRAINAGE AREA.--771 mi^2 (1,997 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1930 to current year.

REVISED RECORDS.--WSP 871: 1938. WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 964.50 ft (293.980 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1937, nonrecording gage on bridge at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Since March 1979, floodflows regulated by detention in upstream reservoirs.

AVERAGE DISCHARGE.--50 years, 806 ft^3/s (22.83 m^3/s), 14.20 in/yr (361 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 128,000 ft^3/s (3,620 m^3/s) June 23, 1972, gage height, 26.27 ft (8.007 m), from floodmark in gage house, from rating curve extended above 31,000 ft^3/s (878 m^3/s) on basis of velocity-area and slope-area studies at gage height 19.2 ft (5.85 m) and conveyance study and slope-area measurements at gage heights 22.87 ft (6.971 m) and 26.27 ft (8.007 m); minimum, 6.1 ft^3/s (0.17 m^3/s) Sept. 1, 1939; minimum gage height, 2.68 ft (0.817 m) Aug. 28, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,200 ft^3/s (289 m^3/s) and maximum (*):

		Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Nov. 27	0300	*11,900	337	*12.41	3.783

Minimum discharge, 21 ft^3/s (0.59 m^3/s) Aug.28, gage height 2.68 ft (0.817 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	193	1210	895	130	167	5940	1800	102	172	52	33
2	163	555	1010	800	120	143	5220	1530	100	148	55	34
3	429	2040	807	720	110	114	3940	1370	108	125	57	36
4	1080	1150	771	580	100	111	2660	1170	157	94	55	33
5	1180	840	706	490	100	121	2790	933	120	90	55	36
6	7730	708	676	450	100	151	2240	817	102	92	55	36
7	3720	643	671	410	100	228	1700	632	96	96	55	36
8	1680	591	636	380	100	3200	1280	505	102	125	55	35
9	1140	524	580	350	100	3150	1750	476	122	122	53	33
10	1040	531	522	320	100	882	4140	452	113	117	53	35
11	806	541	493	340	100	523	4010	433	108	108	53	31
12	681	455	385	420	100	368	2940	500	106	82	53	31
13	675	409	492	410	100	274	2080	393	98	80	52	30
14	636	391	752	390	100	176	1850	804	98	74	53	33
15	514	356	566	665	100	259	4500	920	96	59	53	31
16	446	349	440	522	100	293	3950	655	120	50	53	31
17	397	337	390	472	100	690	2310	604	125	53	55	33
18	358	312	320	443	100	4190	1900	500	102	48	57	36
19	326	294	310	464	110	4440	1350	379	94	46	50	35
20	295	277	300	400	120	2520	1240	452	100	46	48	33
21	274	256	340	330	139	3360	1280	566	122	46	48	33
22	253	247	360	280	322	6130	980	375	106	46	46	33
23	238	250	400	320	600	6290	661	332	96	46	45	31
24	271	250	1040	210	1400	5610	561	239	80	46	43	30
25	312	302	4420	200	600	6150	725	205	74	46	40	31
26	264	4140	6080	210	504	4960	920	178	70	46	30	38
27	240	10600	3530	220	279	3120	588	154	59	45	25	31
28	231	5670	2070	200	228	2060	953	128	53	45	22	30
29	237	2840	1540	180	236	3320	3400	120	61	50	30	30
30	228	1630	1280	150	---	4890	2760	131	175	59	38	30
31	208	---	1090	140	---	5920	---	106	---	50	33	---
TOTAL	26257	37681	34187	12361	6398	73810	70618	17859	3065	2352	1472	988
MEAN	847	1256	1103	399	221	2381	2354	576	102	75.9	47.5	32.9
MAX	7730	10600	6080	895	1400	6290	5940	1800	175	172	57	38
MIN	163	193	300	140	100	111	561	106	53	45	22	30
CFSM	1.10	1.63	1.43	.52	.29	3.09	3.05	.75	.13	.10	.06	.04
IN.	1.27	1.82	1.65	.60	.31	3.56	3.41	.86	.15	.11	.07	.05

CAL YR 1979 TOTAL 361485 MEAN 990 MAX 12500 MIN 40 CFSM 1.28 IN 17.44
WTR YR00980 TOTAL 287048 MEAN 784 MAX 10600 MIN 22 CFSM 1.02 IN 13.85

01520500 TIOGA RIVER AT LINDLEY, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-67, 1971 to current year.
CHEMICAL DATA: 1964 (b), 1965 (c), 1966 (a), 1971-73 (a), 1974-77 (d).
MINOR ELEMENTS DATA: 1973 (a), 1974 (c), 1975-76 (a).
PESTICIDE DATA: 1975-76 (a).
ORGANIC DATA: OC--1975-76 (a).
PCB--1975-76 (a).
NUTRIENT DATA: 1974-75 (d), 1976-77 (b).
SEDIMENT DATA: 1963-64 (b), 1967 (e), 1975 (d), 1976 (a), 1977 (b), 1978-79 (d), 1980 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August 1974 to July 1977.
WATER TEMPERATURES: August 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: August 1974 to current year.

REMARKS.--Since March 1979, flood flows regulated by detention in upstream reservoirs. No water temperature record Dec. 21 to Sept. 30.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES (water years 1974-79): Maximum daily 30.0°C on July 19, 1977; minimum daily, freezing point on many days during winter periods.
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,100 mg/L Mar. 13, 1977; minimum daily mean, 1 mg/L on several days during 1975, 1978, and 1979 water years.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 194,000 tons (176,000 Mg) Sept. 26, 1975; minimum daily, 0.16 ton (0.15 Mg) Sept. 29, 30, 1980.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,040 mg/L Nov. 26; minimum daily mean, 2 mg/L Sept. 22, 27, 29, 30.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 19,000 tons (17,200 Mg) Nov. 26; minimum daily, 0.16 ton (0.15 Mg) Sept. 29, 30.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM FLOW, INSTAN TANEOUS (FT^3/S)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
OCT							
05...	1930	1820	273	1340	36	52	69
NOV							
26...	1500	5860	2780	42600	29	43	58
DEC							
25...	1600	6000	629	10200	29	42	55
FEB							
23...	2100	2800	164	1240	42	62	77
MAR							
21...	1630	5390	1880	27300	19	28	39
31...	1430	6410	269	4660	34	49	65

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
OCT						
05...	86	94	95	96	96	98
NOV						
26...	71	84	87	95	99	100
DEC						
25...	69	79	80	90	96	100
FEB						
23...	89	95	95	99	100	--
MAR						
21...	54	71	85	98	100	--
31...	80	88	89	95	95	100

01520500 TIOGA RIVER AT LINDLEY, NY--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8	4.4	13	6.8	18	59	10	24	8	2.8	10	4.5
2	7	3.1	39	106	15	41	23	50	8	2.6	9	3.5
3	36	71	50	282	15	33	14	27	9	2.7	8	2.5
4	84	265	13	40	14	29	9	14	9	2.4	10	3.0
5	130	968	11	25	12	23	15	20	8	2.2	10	3.3
6	396	8320	21	40	11	20	12	15	9	2.4	30	12
7	70	703	12	21	11	20	12	13	9	2.4	110	68
8	28	127	17	27	15	26	7	7.2	8	2.2	729	6420
9	22	68	20	28	12	19	5	4.7	8	2.2	180	1530
10	24	67	18	26	9	13	8	6.9	8	2.2	60	143
11	21	46	9	13	7	9.3	12	11	7	1.9	40	56
12	20	37	10	12	7	7.3	14	16	8	2.2	30	30
13	22	40	19	21	14	24	11	12	8	2.2	20	15
14	17	29	19	20	11	22	17	18	8	2.2	10	4.8
15	14	19	21	20	21	20	23	41	6	1.6	10	7.0
16	16	19	12	11	8	9.5	10	14	8	2.2	10	7.9
17	20	21	9	8.2	16	17	16	20	8	2.2	396	1670
18	21	20	13	11	16	15	11	13	7	1.9	644	5980
19	16	14	7	5.6	18	15	16	20	8	2.4	279	3390
20	14	11	6	4.5	10	8.1	13	14	6	1.9	120	816
21	8	5.9	8	5.5	12	13	11	9.8	7	2.6	480	8000
22	7	4.8	8	5.3	18	17	7	5.3	9	7.8	918	15100
23	10	6.4	15	10	20	22	11	10	291	1820	440	7470
24	12	8.8	8	5.4	53	149	8	5.3	68	257	220	3330
25	12	10	4	3.3	260	3810	9	4.9	30	49	167	2770
26	9	6.4	1040	19000	205	3370	12	6.8	20	27	95	1270
27	11	7.1	616	18300	60	572	13	7.7	10	7.5	62	522
28	8	5.0	135	2070	23	129	10	5.4	10	6.2	64	356
29	6	3.8	52	394	18	75	11	5.3	10	6.4	231	2070
30	8	4.9	34	150	14	48	11	4.5	---	---	104	1360
31	9	5.1	---	---	11	32	9	3.4	---	---	206	3460
TOTAL	---	10920.7	---	40651.6	---	8667.2	---	429.2	---	2228.3	---	65874.5

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	154	2470	31	133	5	1.4	55	25	5	.70	5	.45
2	60	846	20	83	5	1.4	20	8.0	3	.45	4	.37
3	35	372	17	63	5	1.5	12	4.1	5	.77	5	.49
4	35	251	14	44	17	7.2	12	3.0	5	.74	8	.71
5	40	301	10	25	5	1.6	10	2.4	4	.59	5	.49
6	25	151	8	18	5	1.4	8	2.0	3	.45	5	.49
7	25	115	16	26	5	1.3	14	3.9	4	.59	5	.49
8	30	104	10	14	5	1.4	13	4.4	3	.45	5	.47
9	66	381	8	10	5	1.6	9	3.0	4	.57	4	.36
10	165	1800	7	8.5	5	1.5	8	2.5	5	.72	4	.38
11	57	617	6	7.0	14	4.9	9	2.6	3	.43	5	.42
12	30	238	53	73	12	4.9	10	2.2	3	.43	3	.25
13	25	140	16	17	5	1.3	10	2.2	4	.56	4	.32
14	58	380	76	189	10	2.6	7	1.4	5	.72	4	.36
15	165	1980	30	75	12	3.1	6	.96	6	.86	5	.42
16	58	619	10	18	20	6.5	5	.68	9	1.3	4	.33
17	13	81	10	16	25	8.4	6	.86	5	.74	4	.36
18	9	46	15	20	10	2.8	7	.91	5	.77	5	.49
19	7	26	20	21	6	1.5	5	.62	5	.68	3	.28
20	8	27	32	40	10	2.7	5	.62	4	.52	4	.36
21	8	28	62	98	15	4.9	3	.37	4	.52	5	.45
22	8	21	10	10	6	1.7	5	.62	4	.50	2	.18
23	8	14	26	23	8	2.1	4	.50	4	.49	5	.42
24	7	11	17	11	6	1.3	5	.62	3	.35	3	.24
25	28	72	7	3.9	6	1.2	5	.62	4	.43	5	.42
26	20	50	5	2.4	5	.95	3	.37	4	.32	5	.51
27	10	16	8	3.3	5	.80	3	.36	5	.34	2	.17
28	87	292	5	1.7	5	.72	5	.61	3	.18	3	.24
29	135	1340	5	1.6	18	3.6	4	.54	3	.24	2	.16
30	35	261	18	6.8	58	29	4	.64	3	.31	2	.16
31	---	---	9	2.6	---	---	5	.68	3	.27	---	---
TOTAL	---	13050	---	1064.8	---	105.27	---	77.28	---	16.99	---	11.24

01520500 TIOGA RIVER AT LINDLEY, NY--Continued

TEMPERATURE (DEG. C OF WATER), WATER YEAR OCTOBER 1979 to SEPTEMBER 1980
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	9.0	4.0									
2	16.5	9.0	3.0									
3	16.0	9.0	3.0									
4	15.0	7.5	2.5									
5	15.0	8.0	3.0									
6	15.0	7.0	4.0									
7	16.0	8.0	5.0									
8	12.5	7.0	5.0									
9	12.0	7.0	5.0									
10	9.0	7.0	4.5									
11	9.0	7.0	5.0									
12	9.0	8.0	8.0									
13	9.0	8.0	4.0									
14	9.0	8.0	4.0									
15	9.0	7.0	4.0									
16	10.0	5.0	3.0									
17	9.0	6.0	-									
18	10.0	5.0	-									
19	14.0	7.0	-									
20	18.0	5.5	2.0									
21	17.0	8.5	-									
22	18.0	9.0	-									
23	17.0	12.0	-									
24	13.0	10.0	-									
25	13.5	10.0	-									
26	8.0	9.0	-									
27	8.0	9.0	-									
28	9.0	10.0	-									
29	9.0	6.5	-									
30	8.5	6.0	-									
31	8.0	---	-									
MEAN	12.5	8.0										

01521000 ARKPORT RESERVOIR NEAR ARKPORT, NY

LOCATION.--Lat 42°23'45", long 77°43'00", Steuben County, Hydrologic Unit 02050104, on right bank 1,000 ft (305 m) upstream from Arkport Dam on Canisteo River, 1.3 mi (2.1 km) west of Arkport, and 2.3 mi (3.7 km) upstream from small tributary.

DRAINAGE AREA.--30.5 mi^2 (79.0 km^2).

PERIOD OF RECORD.--January 1951 to current year.

REVISED RECORDS.--WSP 1552: 1951-57. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in 1940 for flood control; first used for flood regulation on Mar. 31, 1940. Usable capacity, 7,936 acre-ft (9.79 hm^3) between elevations 1,218.0 ft (371.25 m), sill of conduit, and 1,304.0 ft (397.46 m), crest of spillway. No dead storage. The flood-control works consist of a pressure conduit and a side-channel spillway and are not provided with gates. Water is stored during high flows and released gradually.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,304.04 ft (397.471 m) June 23, 1972, contents, 7,944 acre-ft (9.79 hm^3); minimum, 1,226.27 ft (373.767 m) many days in September 1980, contents, 0.3 acre-ft (370 m^3).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,243.75 ft (379.095 m) Mar. 31, contents, 649.5 acre-ft (0.80 hm^3); minimum 1,226.27 ft (373.767 m) many days in September, contents, 0.3 acre-ft (370 m^3).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1937)

1,226.00	0	1,235.00	264	1,270.00	2,908
1,227.00	1	1,240.00	462	1,280.00	4,142
1,228.00	8	1,245.00	719	1,290.00	5,552
1,229.00	51	1,250.00	1,040	1,300.00	7,192
1,230.00	122	1,260.00	1,861	1,310.00	9,161

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1226.99	1227.63	1228.10	1228.13	1227.81	1227.96	1237.35	1228.60	1228.08	1228.04	1226.29	1226.29
2	1226.99	1227.80	1228.03	1228.11	1227.82	1227.89	1231.81	1228.51	1228.08	1228.01	1226.28	1226.29
3	1227.06	1227.79	1227.95	1228.06	1227.84	1227.89	1228.85	1228.45	1228.11	1228.00	1226.28	1226.29
4	1227.14	1227.69	1227.99	1227.88	1227.82	1227.85	1229.73	1228.39	1228.11	1227.98	1226.29	1226.28
5	1227.96	1227.64	1227.99	1227.98	1227.81	1227.92	1229.22	1228.34	1228.07	1228.02	1226.29	1226.29
6	1229.08	1227.61	1228.11	1227.95	1227.79	1228.02	1228.63	1228.32	1228.05	1228.12	1226.29	1226.28
7	1228.02	1227.66	1228.15	1227.93	1227.76	1228.01	1228.57	1228.31	1228.05	1228.03	1226.29	1226.28
8	1227.94	1227.65	1228.18	1227.90	1227.75	1229.25	1228.53	1228.28	1228.09	1228.02	1226.29	1226.28
9	1228.02	1227.62	1228.03	1227.86	1227.74	1228.70	1229.47	1228.26	1228.10	1228.00	1226.29	1226.28
10	1227.92	1227.81	1227.99	1227.84	1227.74	1228.86	1230.00	1228.24	1228.09	1227.99	1226.29	1226.28
11	1227.91	1227.74	1228.01	1227.95	1227.73	1229.88	1228.61	1228.23	1228.06	1227.97	1226.29	1226.28
12	1227.80	1227.67	1228.06	1228.16	1227.72	1229.13	1228.58	1228.24	1228.05	1227.96	1226.29	1226.28
13	1227.81	1227.64	1228.16	1227.94	1227.72	1228.23	1228.89	1228.26	1228.03	1227.95	1226.29	1226.28
14	1227.84	1227.70	1228.04	1228.04	1227.72	1228.27	1229.91	1228.35	1228.02	1228.11	1226.29	1226.28
15	1227.78	1227.69	1227.97	1228.08	1227.72	1228.24	1232.91	1228.32	1228.04	1227.20	1226.28	1226.28
16	1227.73	1227.74	1227.95	1228.04	1227.73	1228.30	1228.97	1228.26	1228.27	1226.43	1226.28	1226.28
17	1227.68	1227.67	1227.81	1228.02	1227.74	1230.43	1228.59	1228.22	1228.13	1226.42	1226.28	1226.28
18	1227.65	1227.67	1227.88	1228.10	1227.82	1231.41	1228.56	1228.22	1228.07	1226.40	1226.29	1226.28
19	1227.62	1227.64	1227.88	1228.07	1227.75	1229.33	1228.49	1228.22	1228.04	1226.39	1226.29	1226.28
20	1227.65	1227.61	1227.89	1227.98	1227.74	1230.57	1228.44	1228.18	1228.09	1226.38	1226.28	1226.28
21	1227.69	1227.60	1227.87	1227.90	1227.78	1235.96	1228.40	1228.20	1228.08	1226.37	1226.28	1226.29
22	1227.63	1227.59	1227.89	1227.90	1227.85	1234.33	1228.35	1228.17	1228.04	1226.36	1226.28	1226.29
23	1227.70	1227.60	1228.34	1227.89	1228.08	1228.73	1228.32	1228.14	1228.02	1226.34	1226.28	1226.28
24	1227.90	1227.69	1229.71	1227.82	1228.05	1229.52	1228.30	1228.13	1228.00	1226.33	1226.28	1226.28
25	1227.80	1228.61	1236.80	1227.86	1227.97	1230.15	1228.34	1228.11	1227.99	1226.32	1226.28	1226.28
26	1227.71	1233.64	1229.26	1227.85	1227.93	1228.62	1228.31	1228.09	1227.98	1226.31	1226.29	1226.28
27	1227.65	1229.10	1228.46	1227.84	1227.91	1229.62	1228.29	1228.08	1227.97	1226.30	1226.29	1226.27
28	1227.74	1228.40	1228.35	1227.83	1227.91	1230.54	1232.20	1228.07	1227.97	1226.29	1226.29	1226.27
29	1227.83	1228.30	1228.30	1227.82	1228.05	1236.80	1236.86	1228.06	1228.00	1226.29	1226.29	1226.27
30	1227.73	1228.19	1228.26	1227.81	---	1235.25	1231.46	1228.06	1228.08	1226.28	1226.29	1226.28
31	1227.66	---	1228.19	1227.81	---	1239.68	---	1228.08	---	1226.28	1226.29	---
MEAN	1227.73	1228.01	1228.44	1227.95	1227.82	1230.17	1229.76	1228.24	1228.06	1227.13	1226.29	1226.28
MAX	1229.08	1233.64	1236.80	1228.16	1228.08	1239.68	1237.35	1228.60	1228.27	1228.12	1226.29	1226.29
MIN	1226.99	1227.59	1227.81	1227.81	1227.72	1227.85	1228.29	1228.06	1227.97	1226.28	1226.28	1226.27
*	5.4	13.6	14.0	6.5	7.9	578.3	46.3	12.3	11.0	0.3	0.3	0.3
**	+0.1	+0.1	0	-0.1	0	+9.3	-8.9	-0.6	0	-0.2	0	0

CAL YR 1979 MEAN 1228.41 MAX 1245.63 MIN 1226.42 ** 0
WTR YR 1980 MEAN 1227.99 MAX 1239.68 MIN 1226.27 ** 0

* Contents, in acre-feet, at end of month.
** Change in contents, equivalent in cubic feet per second.

01521500 CANISTEO RIVER AT ARKPORT, NY

LOCATION.--Lat 42°23'45", long 77°42'42", Steuben County, Hydrologic Unit 02050104, on left bank 0.2 mi (0.3 km) downstream from Arkport Dam, and 0.9 mi (1.4 km) west of Arkport.

DRAINAGE AREA.--30.6 mi^2 (79.3 km^2).

PERIOD OF RECORD.--January 1937 to current year.

REVISED RECORDS.--WSP 1552: 1952-57. WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,202.85 ft (366.629 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Since November 1939, flows above 500 ft^3/s (14.2 m^3/s) controlled by detention in Arkport Reservoir (see station 01521000).

AVERAGE DISCHARGE.--43 years, 35.5 ft^3/s (1.01 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft^3/s (56.6 m^3/s) Mar. 5, 1938, Feb. 20, 1939; maximum gage height, 5.63 ft (1.716 m) Feb. 19, 1939 (ice jam); practically no flow July 30, 1938, Sept. 30, 1939 (result of construction operations).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a discharge of 4,820 ft^3/s (137 m^3/s), on basis of slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 613 ft^3/s (17.4 m^3/s) Nov. 26, gage height, 3.02 ft (0.920 m); minimum 0.68 ft^3/s (0.02 m^3/s) many days, gage height, 0.62 ft (0.189 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	12	30	25	10	7.0	319	52	4.5	3.2	.68	1.3
2	3.7	25	26	24	9.0	7.0	153	39	4.4	2.5	2.7	3.2
3	6.6	24	21	21	8.0	6.0	87	31	5.2	2.1	22	5.5
4	9.2	17	22	16	11	6.0	98	25	5.5	1.9	11	3.0
5	112	13	22	17	10	12	87	21	4.0	2.7	4.6	2.4
6	174	11	31	17	8.0	26	59	19	3.4	5.5	3.2	2.0
7	44	13	34	13	7.0	14	48	18	3.4	2.9	2.5	1.8
8	36	15	37	15	6.0	160	43	15	4.3	2.7	2.3	1.6
9	47	12	25	11	6.0	69	69	14	4.6	2.5	1.9	1.6
10	35	25	23	10	5.0	86	78	12	4.3	2.1	1.7	1.9
11	34	21	24	10	4.0	140	55	12	3.7	1.9	4.6	1.6
12	24	16	27	9.0	4.0	49	49	12	3.4	1.7	4.9	1.4
13	25	13	36	10	3.0	48	57	14	2.9	1.5	3.2	1.4
14	27	18	26	22	2.0	50	68	22	2.7	1.3	3.2	2.9
15	22	18	22	20	3.0	31	119	19	2.9	1.5	4.3	2.7
16	18	20	20	18	4.0	37	65	14	14	1.3	3.4	2.2
17	13	16	19	16	5.0	138	53	13	6.0	1.1	2.5	2.3
18	11	16	17	21	6.0	203	48	12	4.0	.95	2.3	2.4
19	9.2	13	15	19	7.0	98	37	11	3.2	.80	2.1	2.2
20	9.9	12	16	14	6.0	170	31	10	4.3	.80	1.9	2.0
21	13	11	32	11	11	357	27	9.5	4.3	.80	1.7	2.0
22	9.9	9.9	16	10	16	300	22	8.0	3.7	.80	1.5	1.9
23	14	11	57	9.0	30	73	20	6.7	2.9	.95	1.5	2.1
24	36	16	158	8.0	25	93	18	5.8	2.7	.80	1.5	2.0
25	25	116	515	13	20	126	22	5.1	2.5	.68	1.5	1.9
26	18	372	139	14	15	67	19	4.7	2.3	.68	1.3	2.3
27	14	139	65	16	12	80	17	4.3	2.1	.68	1.3	2.3
28	19	62	47	14	8.0	120	115	4.2	2.1	.68	1.1	2.2
29	27	49	41	11	8.0	350	240	4.0	2.5	.95	1.1	2.1
30	19	37	37	9.0	---	270	91	3.9	4.0	.95	1.5	2.1
31	15	---	31	10	---	323	---	4.2	---	.80	1.5	---
TOTAL	874.5	1152.9	1631	453.0	269.0	3516.0	2214	445.4	119.8	49.72	100.48	66.3
MEAN	28.2	38.4	52.6	14.6	9.28	113	73.8	14.4	3.99	1.60	3.24	2.21
MAX	174	372	515	25	30	357	319	52	14	5.5	22	5.5
MIN	3.7	9.9	15	8.0	2.0	6.0	17	3.9	2.1	.68	.68	1.3

CAL YR 1979 TOTAL 15461.80 MEAN 42.4 MAX 677 MIN 1.9
WTR YR 1980 TOTAL 10892.10 MEAN 29.8 MAX 515 MIN .68

01523000 ALMOND LAKE NEAR ALMOND, NY

LOCATION.--Lat 42°20'50", long 77°42'20", Steuben County, Hydrologic Unit 02050104, at Almond Dam on Canacadea Creek, 2 mi (3 km) northeast of Almond, and 3 mi (5 km) upstream from mouth.

DRAINAGE AREA.--55.8 mi^2 (145 km^2).

PERIOD OF RECORD.--July 1949 to September 1952 (monthly elevations and contents), October 1952 to current year. Prior to October 1970, published as "Almond Reservoir near Almond."

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Lake is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in June 1949 for flood control; first used for flood regulation on Mar. 28, 1950. Usable capacity, 14,800 acre-ft (18.2 hm^3) between elevations 1,229.0 ft or 374.60 m (sill of gates) and 1,300.0 ft or 396.24 m (crest of spillway). No dead storage. Figures given herein represent usable contents. Discharge is controlled by the operation of three gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,298.58 ft (395.807 m) June 23, 1972, contents, 14,100 acre-ft (17.4 hm^3); no contents for many days each year 1949-65.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,258.05 ft (383.454 m) Mar. 21, contents, 1,467 acre-ft (1.81 hm^3); minimum, 1,249.06 ft (380.713 m) Mar. 3, contents, 495 acre-ft (610,335 m^3).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1938)

1,240.00	80	1,260.00	1,750
1,245.00	230	1,270.00	3,750
1,250.00	570	1,280.00	6,570
1,255.00	1,080	1,290.00	10,300

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1253.35	1250.46	1250.21	1250.92	1250.24	1250.10	1252.53	1250.41	1255.08	1255.09	1254.58	1255.00
2	1253.01	1250.58	1250.69	1251.12	1250.17	1249.91	1250.99	1250.35	1255.12	1255.09	1254.59	1255.08
3	1252.72	1251.18	1250.23	1250.54	1250.16	1249.55	1251.06	1250.88	1255.20	1255.07	1255.18	1255.37
4	1252.53	1251.34	1250.41	1250.20	1250.14	1249.44	1250.73	1250.92	1255.32	1255.04	1255.51	1255.47
5	1252.52	1251.36	1250.55	1250.28	1250.16	1249.89	1250.72	1250.85	1255.35	1255.03	1255.22	1255.50
6	1252.84	1251.26	1250.90	1250.46	1250.16	1249.77	1250.86	1251.40	1255.36	1255.07	1255.08	1255.50
7	1252.23	1251.23	1251.33	1250.60	1250.16	1250.13	1251.35	1252.00	1255.37	1255.09	1254.99	1255.49
8	1251.75	1250.92	1251.77	1250.64	1250.16	1252.31	1251.43	1252.47	1255.44	1255.06	1255.04	1255.48
9	1251.07	1250.50	1251.48	1250.58	1250.15	1252.39	1251.30	1252.86	1255.51	1255.04	1255.16	1255.47
10	1250.70	1250.54	1250.97	1250.44	1250.14	1250.75	1250.25	1253.15	1255.41	1255.03	1255.15	1255.47
11	1250.47	1250.84	1250.60	1250.32	1250.10	1253.02	1250.11	1253.35	1255.27	1255.01	1255.15	1255.47
12	1250.90	1250.70	1250.76	1251.29	1250.07	1250.46	1250.45	1253.60	1255.17	1254.96	1255.16	1255.46
13	1251.02	1250.38	1250.88	1251.45	1250.05	1250.28	1250.90	1253.77	1255.17	1254.91	1255.11	1255.44
14	1251.03	1250.24	1250.50	1251.55	1250.04	1250.35	1250.49	1254.88	1255.17	1254.84	1255.06	1255.47
15	1250.97	1250.14	1249.92	1251.71	1250.03	1250.47	1250.73	1255.65	1255.14	1254.82	1255.19	1255.56
16	1250.77	1250.05	1249.94	1251.65	1250.04	1250.63	1249.91	1255.65	1255.20	1254.82	1255.26	1255.58
17	1250.50	1250.20	1249.97	1251.47	1250.04	1251.11	1250.78	1253.22	1255.26	1254.83	1255.27	1255.59
18	1250.28	1250.27	1249.94	1251.24	1250.02	1251.39	1251.11	1253.21	1255.25	1254.82	1255.23	1255.61
19	1250.28	1250.31	1250.20	1251.24	1250.03	1251.03	1251.20	1253.61	1255.22	1254.81	1255.18	1255.62
20	1250.31	1250.32	1250.39	1251.07	1250.04	1250.95	1251.00	1253.94	1255.20	1254.79	1255.09	1255.62
21	1250.32	1250.24	1250.54	1250.69	1250.14	1254.05	1250.54	1254.17	1255.22	1254.77	1255.04	1255.61
22	1250.28	1250.18	1250.70	1250.28	1250.47	1255.70	1249.97	1254.38	1255.20	1254.74	1255.04	1255.60
23	1250.31	1250.11	1250.78	1250.20	1251.37	1250.31	1250.02	1254.55	1255.16	1254.72	1255.02	1255.59
24	1250.69	1250.16	1250.46	1249.91	1250.31	1250.51	1250.01	1254.70	1255.11	1254.70	1255.01	1255.57
25	1250.61	1250.96	1253.47	1249.96	1250.32	1250.67	1249.95	1254.79	1255.04	1254.65	1255.01	1255.55
26	1250.42	1253.44	1251.11	1250.05	1250.15	1250.32	1249.91	1254.85	1254.97	1254.60	1254.99	1255.54
27	1250.18	1252.20	1250.05	1250.16	1250.12	1251.21	1249.85	1254.89	1254.94	1254.55	1254.96	1255.55
28	1250.22	1251.22	1249.91	1250.25	1250.26	1253.38	1251.11	1254.94	1254.92	1254.52	1254.93	1255.54
29	1250.44	1250.54	1251.35	1250.28	1250.22	1255.28	1250.54	1254.99	1254.91	1254.56	1254.91	1255.52
30	1250.55	1250.45	1251.90	1250.30	---	1253.91	1250.32	1255.03	1255.00	1254.64	1254.89	1255.50
31	1250.54	---	1250.83	1250.29	---	1254.97	---	1255.06	---	1254.61	1254.98	---
MEAN	1251.09	1250.74	1250.73	1250.68	1250.19	1251.43	1250.67	1253.50	1255.19	1254.85	1255.06	1255.49
MAX	1253.35	1253.44	1253.47	1251.71	1251.37	1255.70	1252.53	1255.65	1255.51	1255.09	1255.51	1255.62
MIN	1250.18	1250.05	1249.91	1249.91	1250.02	1249.44	1249.85	1250.35	1254.91	1254.52	1254.58	1255.00
*	616	593	638	595	587	1,176	604	1,087	1,086	1,036	1,079	1,139
**	-4.9	-.4	+.7	-.7	-.1	+9.6	-9.6	+7.9	0	-.8	+.7	+1.0

CAL YR 1979 MEAN 1252.70 MAX 1269.70 MIN 1249.52 ** +.1
WTR YR 1980 MEAN 1252.48 MAX 1255.70 MIN 1249.44 ** +.3

* Contents, in acre-feet, at end of month.
** Change in contents, equivalent in cubic feet per second.

01523500 CANACADEA CREEK NEAR HORNELL, NY

LOCATION.--Lat 42°20'05", long 77°41'00", Steuben County, Hydrologic Unit 02050104, on right bank 35 ft (11 m) downstream from bridge on State Highway 21, 1.2 mi (1.9 km) west of Hornell, 1.5 mi (2.4 km) downstream from Almond Dam, and 2 mi (3 km) upstream from mouth.

DRAINAGE AREA.--57.9 mi^2 (150 km^2).

PERIOD OF RECORD.--October 1940 to December 1942, October 1944 to current year.

REVISED RECORDS.--WSP 2103: Drainage area. WRD NY 1971: 1969(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,185.68 ft (361.395 m) National Geodetic Vertical Datum of 1929. Oct. 23, 1940 to Dec. 31, 1942, at site 185 ft (56 m) upstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Since October 1948, floodflows regulated by detention in Almond Lake (see station 01523000). Occasional regulation at low flows to clear debris from gates at Almond Lake. Monthly figures for 1952-66 water years adjusted for regulation.

AVERAGE DISCHARGE.--38 years (1940-42, 1944-80), 64.6 ft^3/s (1.829 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,430 ft^3/s (267 m^3/s) May 17, 1945, gage height, 5.14 ft (1.567 m), from rating curve extended above 3,400 ft^3/s (96.3 m^3/s); maximum gage height, 6.65 ft (2.027 m) June 3, 1947; minimum discharge, 0.5 ft^3/s (0.014 m^3/s) May 29, 1965, gage height, 0.61 ft (0.186 m); minimum daily, 0.6 ft^3/s (0.017 m^3/s) May 30 to June 1, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a stage of 16.61 ft (5.063 m), discharge, 21,000 ft^3/s (595 m^3/s), from floodmarks on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 784 ft^3/s (22.2 m^3/s) Nov. 26, gage height, 2.74 ft (0.835 m); minimum, 6.6 ft^3/s (0.19 m^3/s) July 15, 16, 17, 18, gage height, 0.84 ft (0.256 m) result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	24	40	35	15	14	590	90	11	10	7.9	7.8
2	29	24	46	53	15	14	190	58	11	10	8.5	8.2
3	29	25	41	53	15	13	188	51	11	9.9	15	8.0
4	29	25	35	31	15	13	184	53	11	9.8	35	8.0
5	139	25	35	24	15	23	176	31	11	10	30	8.0
6	293	25	35	23	16	52	74	15	11	10	19	8.0
7	96	33	35	22	16	25	79	15	11	10	13	8.0
8	79	36	50	22	16	210	79	15	11	10	11	8.0
9	88	36	56	22	15	290	200	15	18	10	11	8.0
10	86	36	55	22	15	59	175	15	22	10	11	8.0
11	35	37	40	22	15	294	102	15	21	10	11	8.0
12	34	36	46	23	14	82	84	15	15	10	11	8.0
13	33	36	61	24	14	45	123	13	13	10	11	8.0
14	33	36	61	24	14	31	127	12	13	10	12	8.2
15	33	35	42	30	14	31	290	18	13	8.9	11	8.0
16	33	28	33	31	14	32	113	115	13	6.6	11	8.0
17	30	25	30	31	14	351	84	113	13	6.6	11	8.0
18	26	25	24	31	13	440	80	11	13	7.3	11	8.0
19	19	24	23	31	13	195	71	11	13	8.0	11	8.0
20	19	24	23	31	13	286	70	11	13	8.0	11	8.0
21	19	24	25	30	12	484	68	11	13	8.0	9.3	8.0
22	19	24	30	27	12	578	49	11	13	8.0	8.0	8.0
23	19	24	85	24	70	251	41	11	13	8.0	8.0	8.0
24	29	24	272	20	40	176	41	11	13	8.0	7.5	8.0
25	34	176	605	17	25	276	41	11	13	8.0	8.0	8.0
26	34	520	408	17	20	115	40	11	11	8.0	8.0	8.1
27	27	432	136	16	16	80	28	11	9.6	8.0	8.0	8.0
28	24	129	63	15	14	220	203	11	9.7	8.0	7.5	8.0
29	24	94	36	15	14	641	371	11	10	8.1	7.5	8.0
30	24	71	85	15	---	574	140	11	11	8.0	8.0	8.0
31	24	---	76	15	---	552	---	11	---	8.0	7.9	---
TOTAL	1469	2113	2632	796	514	6447	4101	813	384.3	273.2	360.1	240.3
MEAN	47.4	70.4	84.9	25.7	17.7	208	137	26.2	12.8	8.81	11.6	8.01
MAX	293	520	605	53	70	641	590	115	22	10	35	8.2
MIN	19	24	23	15	12	13	28	11	9.6	6.6	7.5	7.8

CAL YR 1979 TOTAL 27423.5 MEAN 75.1 MAX 893 MIN 8.5
WTR YR 1980 TOTAL 20142.9 MEAN 55.0 MAX 641 MIN 6.6

01524500 CANISTEO RIVER BELOW CANACADEA CREEK, AT HORNELL, NY

LOCATION.--Lat 42°18'50", long 77°39'05", Steuben County, Hydrologic Unit 02050104, on right bank 235 ft (72 m) upstream from Erie Railroad bridge in Hornell, 0.3 mi (0.5 km) upstream from Crosby Creek, and 1.5 mi (2.4 km) downstream from Canacadea Creek.

DRAINAGE AREA.--158 mi^2 (409 km^2).

PERIOD OF RECORD.--August 1942 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,131.32 ft (344.826 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Diversion from Carrington Creek, a tributary upstream from station, by city of Hornell for municipal supply (1980 average, 3.6 ft^3/s or 0.10 m^3/s); sewage enters river downstream from gage. Since Nov. 1939, flood flows regulated by Arkport Reservoir (see station 01521000), and, since October 1948, by Almond Lake (see station 01523000); normal regulation occasionally sufficient to materially affect figures of monthly runoff.

COOPERATION.--Records of diversion from Carrington Creek furnished by city of Hornell.

AVERAGE DISCHARGE.--38 years, 158 ft^3/s (4.475 m^3/s), 13.58 in/yr (345 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft^3/s (271 m^3/s) June 23, 1972, gage height, 13.45 ft (4.100 m), from floodmark, from rating curve extended above 7,600 ft^3/s (215 m^3/s) on basis of critical-depth measurement of peak flow; minimum, 7.4 ft^3/s (0.21 m^3/s) Sept. 13, 14, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,840 ft^3/s (52.1 m^3/s) Mar. 21, gage height, 6.63 ft (2.021 m); minimum, 12 ft^3/s (0.34 m^3/s) Aug. 1, gage height, 0.38 ft (0.116 m), result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	57	111	112	40	46	1300	234	40	28	17	20
2	43	73	108	122	39	45	647	181	39	24	34	35
3	49	74	104	118	38	44	433	149	43	24	76	34
4	54	62	91	74	42	38	420	137	40	23	66	24
5	232	58	88	74	41	46	392	109	38	31	48	22
6	556	56	103	70	40	120	241	88	35	35	34	20
7	182	63	110	64	38	75	216	85	37	26	27	20
8	142	68	123	70	36	520	202	78	40	27	26	20
9	162	67	111	62	35	463	332	74	42	24	24	20
10	152	78	108	60	34	200	402	70	46	24	24	21
11	103	77	98	60	34	576	255	68	44	23	32	20
12	87	70	99	60	33	187	216	68	38	23	32	20
13	83	68	132	62	31	95	254	72	33	24	36	19
14	84	73	117	66	29	87	278	80	32	21	37	30
15	79	72	94	80	30	85	584	80	35	20	36	23
16	74	70	81	81	31	95	291	133	46	18	31	20
17	68	60	66	80	32	584	233	165	38	16	28	21
18	61	59	64	84	35	927	226	61	36	16	28	21
19	53	58	62	85	34	378	192	60	36	18	26	20
20	52	56	60	77	33	564	176	56	36	17	24	19
21	55	55	84	68	38	1130	163	55	36	17	23	18
22	52	54	72	64	46	1070	133	52	36	17	21	18
23	52	54	151	58	140	448	114	48	36	17	21	19
24	87	56	528	40	98	410	109	42	34	17	20	18
25	81	286	1490	44	70	659	110	40	33	16	20	18
26	74	973	854	46	54	303	105	38	29	16	19	20
27	63	816	314	48	49	255	90	38	24	17	19	18
28	64	254	201	44	50	450	383	38	24	17	19	16
29	71	252	151	40	49	1340	899	37	28	21	19	15
30	66	198	181	39	---	1210	378	37	36	20	23	15
31	60	---	168	41	---	1370	---	38	---	18	23	---
TOTAL	3083	4317	6124	2093	1299	13820	9774	2511	1090	655	913	624
MEAN	99.5	144	198	67.5	44.8	446	326	81.0	36.3	21.1	29.5	20.8
MAX	556	973	1490	122	140	1370	1300	234	46	35	76	35
MIN	42	54	60	39	29	38	90	37	24	16	17	15

CAL YR 1979 TOTAL 65449 MEAN 179 MAX 2310 MIN 28
WTR YR 1980 TOTAL 46303 MEAN 127 MAX 1490 MIN 15

01526500 TIOGA RIVER NEAR ERWINS, NY

LOCATION.--Lat 42°07'15", long 77°07'45", Steuben County, Hydrologic Unit 02050104, on right bank 20 ft (6 m) downstream from bridge on Mulholland Road, 1.1 mi (1.8 km) northeast of Erwins, and 1.1 mi (1.8 km) downstream from Canisteo River.

DRAINAGE AREA.--1,377 mi^2 (3,566 km^2).

PERIOD OF RECORD.--July 1918 to current year.

REVISED RECORDS.--WSP 891: 1935-38. WSP 1672: 1919(M), 1927(M), 1929(M). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 931.24 ft (283.842 m) National Geodetic Vertical Datum of 1929. Prior to June 21, 1931, nonrecording gage on highway bridge at same datum.

REMARKS.--Records fair. High flows regulated by upstream reservoirs.

AVERAGE DISCHARGE.--62 years, 1,380 ft^3/s (39.08 m^3/s), 13.61 in/yr (346 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 190,000 ft^3/s (5,380 m^3/s) June 23, 1972, from rating curve extended above 90,000 ft^3/s (2,550 m^3/s) on basis of computation of peak flow at Lindley and Canisteo River at Erwins, 7.2 mi (11.6 km) and 2.0 mi (3.2 km) upstream, respectively, adjusted for flow from intervening area, gage height, 26.74 ft (8.150 m), from floodmarks; minimum, 18 ft^3/s (0.51 m^3/s) Sept. 2, 3, 1939; minimum gage height, 0.40 ft (0.122 m) Sept. 8, 9, 1954, July 23, Aug. 10, 11, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 17,000 ft^3/s (481 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	2000	*21,600	612	*11.61	3.539	Mar. 21	2100	21,000	595	11.45	3.490

Minimum discharge, 54 ft^3/s (1.53 m^3/s) Sept. 30, gage height, 0.54 ft (0.165 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	295	334	1860	1430	240	330	10300	3110	237	270	98	76
2	292	806	1470	1230	220	290	8140	2590	228	240	130	98
3	342	2760	1160	1120	210	280	6060	2230	241	210	180	96
4	1220	1560	1110	895	200	270	4500	1930	312	160	170	82
5	1640	1070	1010	701	190	280	4540	1550	283	160	140	82
6	11400	887	984	680	190	340	3620	1350	232	170	130	82
7	5410	798	1040	600	190	380	2830	1100	211	160	120	80
8	2580	739	998	520	190	4200	2260	914	219	210	120	78
9	1790	680	906	500	180	4500	3070	827	254	200	110	76
10	1680	698	793	470	180	1700	6650	782	250	190	110	80
11	1300	755	751	490	180	1500	5670	738	241	180	120	72
12	1060	643	681	640	180	920	4260	789	237	150	120	68
13	993	580	726	600	170	660	3260	745	219	150	120	66
14	945	565	1070	563	170	450	3170	1430	191	140	130	70
15	770	557	849	803	170	560	7450	1590	203	110	130	73
16	677	539	680	704	170	640	5920	1140	273	100	120	83
17	609	517	560	642	180	1310	3780	1110	343	100	120	75
18	559	475	480	612	180	8380	3100	955	245	92	120	75
19	511	451	460	646	190	6110	2380	738	203	92	110	70
20	466	429	450	592	210	4260	2110	760	224	92	100	68
21	439	405	480	507	220	8490	2040	874	245	92	100	68
22	416	391	520	448	450	11200	1710	667	228	90	96	66
23	393	386	580	493	800	8100	1240	599	199	90	96	63
24	398	389	1900	362	1600	7260	1060	480	172	90	92	59
25	467	451	9810	336	800	8920	1130	423	154	90	86	59
26	443	9940	10900	378	700	6780	1450	374	143	90	72	66
27	406	14800	5770	388	580	4380	997	333	140	90	66	59
28	390	7690	3460	366	480	3420	1890	297	147	90	62	59
29	383	4270	2500	341	450	7240	6400	273	147	100	72	56
30	384	2520	2070	270	---	9110	5010	273	179	110	86	54
31	358	---	1790	250	---	11700	---	254	---	98	82	---
TOTAL	39016	57085	57818	18577	9870	23960	115997	31225	6600	4206	3408	2159
MEAN	1259	1903	1865	599	340	3999	3867	1007	220	136	110	72.0
MAX	11400	14800	10900	1430	1600	11700	10300	3110	343	270	180	98
MIN	292	334	450	250	170	270	997	254	140	90	62	54
CFSM	.91	1.38	1.35	.44	.25	2.90	2.81	.73	.16	.10	.08	.05
IN.	1.05	1.54	1.56	.50	.27	3.35	3.13	.84	.18	.11	.09	.06

CAL YR 1979 TOTAL 617329 MEAN 1691 MAX 25500 MIN 110 CFSM 1.23 IN 16.68
WTR YR 1980 TOTAL 469921 MEAN 1284 MAX 14800 MIN 54 CFSM .93 IN 12.70

01527000 COHOCTON RIVER AT COHOCTON, NY

LOCATION.--Lat 42°30'00", long 77°30'02", Steuben County, Hydrologic Unit 02050105, on left bank 450 ft (137 m) downstream from bridge on U.S. Highway 15 at Cohocton, 800 ft (244 m) downstream from small tributary, and 1.4 mi (2.3 km) upstream from Reynolds Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--52.2 mi^2 (135 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WSP 2103: Drainage area. WRD NY 1972: 1970, 1971.

GAGE.--Water-stage recorder. Datum of gage is 1,275.49 ft (388.769 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--30 years, 57.3 ft^3/s (1.623 m^3/s), 14.91 in/yr (379 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft^3/s (64.0 m^3/s) June 23, 1972, gage height, 9.82 ft (2.993 m); minimum, 0.1 ft^3/s (0.003 m^3/s) Oct. 6, 1954, gage height, 1.30 ft (0.396 m), result of regulation from unknown cause.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft^3/s (8.50 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 1	2300	*353	10.0	*4.73	1.442

Minimum discharge, 4.5 ft^3/s (0.13 m^3/s) Aug. 30, 31, gage height, 1.34 ft (0.408 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	26	94	116	23	16	330	105	25	18	7.8	5.5
2	14	28	79	99	22	15	347	97	23	15	8.5	10
3	15	31	69	86	22	14	319	90	24	13	18	14
4	18	28	60	73	22	15	280	81	25	13	18	12
5	30	26	56	62	21	16	242	72	21	12	11	9.0
6	58	26	56	58	21	17	206	67	20	15	9.8	8.2
7	63	27	57	50	21	19	172	62	20	12	10	7.5
8	58	32	56	47	20	22	145	59	23	12	10	7.1
9	50	30	52	44	20	27	135	54	24	12	10	6.9
10	45	31	49	41	20	38	144	50	23	11	8.5	7.5
11	42	30	46	38	19	60	141	47	21	15	10	7.8
12	37	28	45	37	19	48	132	46	19	10	14	7.8
13	35	27	44	36	19	40	122	46	18	9.2	11	7.3
14	34	28	43	35	18	32	117	47	17	8.8	9.2	11
15	32	30	40	34	18	27	120	46	16	12	11	18
16	30	29	36	33	18	30	125	41	23	9.5	11	16
17	28	28	35	32	17	40	122	37	20	9.2	8.5	14
18	27	27	34	31	17	60	115	35	17	8.5	7.5	13
19	26	26	32	30	16	90	109	36	15	8.0	7.5	12
20	25	25	30	28	16	110	101	34	17	9.2	7.1	10
21	24	24	31	27	17	181	94	32	18	10	6.5	10
22	23	24	32	28	18	237	85	30	15	8.2	6.7	9.8
23	23	24	36	27	20	247	77	28	14	8.5	6.1	9.5
24	34	24	53	26	22	242	70	27	13	8.5	5.5	8.8
25	35	37	156	26	21	213	69	26	13	8.8	5.5	7.3
26	29	83	239	25	20	185	64	25	12	8.0	5.3	8.0
27	26	125	288	25	19	154	60	23	12	7.8	5.5	8.5
28	27	135	268	24	18	136	69	23	12	7.8	5.5	9.2
29	31	124	216	24	17	175	89	23	19	8.2	5.3	9.0
30	29	109	170	24	---	215	106	22	20	8.5	4.9	9.0
31	26	---	138	23	---	285	---	26	---	7.8	4.7	---
TOTAL	989	1272	2640	1289	561	3006	4307	1437	559	324.5	269.9	293.7
MEAN	31.9	42.4	85.2	41.6	19.3	97.0	144	46.4	18.6	10.5	8.71	9.79
MAX	63	135	288	116	23	285	347	105	25	18	18	18
MIN	14	24	30	23	16	14	60	22	12	7.8	4.7	5.5
CFSM	.61	.81	1.63	.80	.37	1.86	2.76	.89	.36	.20	.17	.19
IN.	.70	.91	1.88	.92	.40	2.14	3.07	1.02	.40	.23	.19	.21

CAL YR 1979 TOTAL 25690.0 MEAN 70.4 MAX 548 MIN 9.2 CFSM 1.35 IN 18.31
WTR YR 1980 TOTAL 16948.1 MEAN 46.3 MAX 347 MIN 4.7 CFSM .89 IN 12.08

01527000 COHOCTON RIVER AT COHOCTON, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March to September 1980 (discontinued).
ORGANIC DATA: OC--1980 (e)
NUTRIENT DATA: 1980 (e)

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March to September 1980 (discontinued).

REMARKS.--Supplemental samples collected on Mar. 21, 22 by an automatic sampler.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 385 mg/L Mar. 21; minimum daily mean, 0 mg/L Sept. 24, 27, 30.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 242 tons (220 Mg), Mar. 21; minimum daily, 0.00 tons (0.00 Mg), Sept. 24, 27, 30.

WATER QUALITY DATA, MARCH 1980 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
MAR								
21...	1600	204	--	--	--	--	--	1.2
21...	2000	290	--	--	--	--	--	1.2
21...	2400	253	--	--	--	--	--	1.2
22...	0400	248	--	--	--	--	--	1.2
22...	0800	244	--	--	--	--	--	1.2
22...	1200	236	--	--	--	--	--	1.2
22...	1600	230	--	--	--	--	--	1.2
22...	2000	228	--	--	--	--	--	1.2
22...	2400	228	--	--	--	--	--	1.2
APR								
01...	1000	313	--	--	--	--	--	1.5
02...	0930	349	--	--	--	--	--	1.6
03...	0900	324	--	--	--	--	--	1.4
05...	0830	247	--	--	--	--	--	1.2
09...	0800	136	--	--	--	--	--	.99
12...	1030	134	--	--	--	--	--	.80
16...	1500	126	--	--	--	--	--	1.3
19...	1100	109	--	--	--	--	--	1.1
23...	1100	78	--	--	--	--	--	1.3
26...	1430	63	--	--	--	--	--	1.3
30...	1500	108	--	--	--	--	--	.65
MAY								
02...	1200	97	258	7.0	10.5	7.7	68	.91
03...	0930	91	--	--	--	--	--	.58
07...	1300	62	--	--	--	--	--	2.2
10...	0900	52	--	--	--	--	--	.97
13...	0900	44	--	--	--	--	--	.93
16...	1030	40	--	--	--	--	--	1.3
21...	1130	32	--	--	--	--	--	1.3
24...	1800	27	--	--	--	--	--	1.3
28...	1100	22	--	--	--	--	--	1.5
31...	1000	26	--	--	--	--	--	1.5
JUN								
04...	1100	25	--	--	--	--	--	1.7
06...	1130	19	--	--	--	--	--	1.6
07...	0930	19	--	--	--	--	--	1.3
11...	1130	20	--	--	--	--	--	1.6
14...	1000	17	--	--	--	--	--	1.6
18...	0900	16	--	--	--	--	--	1.3
21...	0900	18	--	--	--	--	--	1.5

01527000 COHOCTON RIVER AT COHOCTON, NY--Continued

WATER QUALITY DATA, MARCH 1980 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
JUN							
25...	1000	12	--	--	--	--	1.4
28...	1000	11	--	--	--	--	1.4
JUL							
01...	1700	17	--	--	--	--	1.2
02...	1100	14	380	7.0	19.0	--	1.3
05...	1500	11	--	--	--	--	.95
09...	1400	12	--	--	--	--	.91
12...	1000	9.0	--	--	--	--	1.2
16...	1400	9.2	--	--	--	--	1.3
19...	1200	7.8	--	--	--	--	.94
23...	1030	8.0	--	--	--	--	1.2
26...	0930	8.0	--	--	--	--	1.4
30...	1030	8.8	--	--	--	--	.96
AUG							
02...	1530	8.5	--	--	--	--	.78
05...	1030	11	--	--	--	--	.65
06...	1130	9.5	409	7.4	23.5	8.5	.93
07...	1730	9.5	--	--	--	--	.70
13...	0930	11	--	--	--	--	--
16...	1000	11	--	--	--	--	1.1
20...	1200	6.9	--	--	--	--	1.1
23...	1600	5.3	--	--	--	--	.47
27...	1030	5.3	--	--	--	--	.41
30...	1130	4.9	--	--	--	--	.43
SEP							
03...	1130	14	--	--	--	--	1.1
06...	1100	8.2	--	--	--	--	.40
10...	1000	7.5	--	--	--	--	.77
13...	1130	6.9	--	--	--	--	1.0
16...	1100	16	--	--	--	--	.94
17...	1130	17	291	7.6	15.5	--	.82
19...	0900	12	--	--	--	--	1.1
22...	0930	9.2	--	--	--	--	1.1
27...	1000	8.0	--	--	--	--	.94

01527000 COHOCTON RIVER AT COHOCTON, NY--Continued

WATER QUALITY DATA, MARCH 1980 TO SEPTEMBER 1980

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED (MG/L AS C)
MAR								
21...	.13	.19	.32	1.5	.18	.07	--	--
21...	.24	1.3	1.5	2.7	.94	.22	--	--
21...	.15	.82	.97	2.2	.44	.08	--	--
22...	.12	.69	.81	2.0	.16	.06	--	--
22...	.11	.33	.44	1.6	.11	.12	--	--
22...	.11	.57	.68	1.9	.11	.04	--	--
22...	.11	.42	.53	1.7	.06	.04	--	--
22...	.12	.59	.71	1.9	.07	.03	--	--
22...	.12	.83	.95	2.2	.16	.12	--	--
APR								
01...	.01	.10	.11	1.6	.03	.02	7.3	.6
02...	.07	.39	.46	2.1	.04	.11	3.1	.6
03...	.00	.37	.37	1.8	.05	.00	8.8	.8
05...	.01	.47	.48	1.7	.07	.00	2.7	.6
09...	.01	.37	.38	1.4	.02	.01	3.0	1.0
12...	.01	.21	.22	1.0	.02	.00	2.7	.6
16...	.02	.28	.30	1.6	.01	.00	4.8	.7
19...	.03	.26	.29	1.4	.02	.00	8.1	.5
23...	.01	.37	.38	1.7	.01	.00	--	--
26...	.01	.16	.17	1.5	.01	.00	2.4	.3
30...	.01	.25	.26	.91	.02	.00	--	.7
MAY								
02...	.09	.26	.35	1.3	.01	.04	14	1.2
03...	.01	.30	.31	.89	.02	.00	4.0	.8
07...	.01	.11	.12	2.3	.01	.01	3.4	.7
10...	.01	.05	.06	1.0	.01	.00	3.1	.7
13...	.01	.64	.65	1.6	.00	.00	2.6	.4
16...	.00	.56	.56	1.9	.00	.00	3.4	.4
21...	.00	.31	.31	1.6	.02	.01	4.0	.5
24...	.00	.40	.40	1.7	.02	.02	3.1	--
28...	.00	.17	.17	1.7	.02	.02	6.6	1.0
31...	.03	.28	.31	1.8	.03	.02	3.6	4.1
JUN								
04...	.03	.31	.34	2.0	.03	.00	3.3	.4
06...	.02	.19	.21	1.8	.06	.01	3.9	.8
07...	.02	.34	.36	1.7	.03	.00	7.4	.3
11...	.01	.17	.18	1.8	.01	.00	4.4	.4
14...	.01	.25	.26	1.9	.02	.00	6.6	.4
18...	.00	.31	.31	1.6	.03	.01	2.3	.4
21...	.02	.24	.26	1.8	.02	.00	3.6	.2
25...	.02	.26	.28	1.7	.02	.00	8.7	.5
28...	.04	.23	.27	1.7	.02	.00	3.0	.2
JUL								
01...	.01	.22	.23	1.4	.03	.00	2.7	--
02...	.04	.24	.28	1.6	.02	.00	13	.4
05...	.00	.22	.22	1.2	.02	.00	2.3	--
09...	.03	.23	.26	1.2	.02	.01	6.6	.4
12...	.03	.38	.41	1.6	.05	.02	3.2	--
16...	.02	.11	.13	1.4	.03	.00	11	.5
19...	.01	.23	.24	1.2	.03	.00	15	.6
23...	.03	.23	.26	1.5	.02	.00	4.7	.7
26...	.02	.29	.31	1.7	.02	.00	2.5	.8
30...	.01	.28	.29	1.3	.03	.01	4.1	.8
AUG								
02...	.00	.70	.70	1.5	.05	.01	3.8	1.2
05...	.03	.28	.31	.96	.03	.00	5.4	.3
06...	.00	.22	.22	1.2	.03	.00	4.5	.4
07...	.00	.03	.03	.73	.02	.01	4.1	.3
13...	--	--	--	--	-	.02	3.4	.4
16...	.02	.32	.34	1.4	.05	.03	8.4	.5
20...	.04	.14	.18	1.3	.03	.01	6.5	.7
23...	.03	.16	.19	.66	.00	.00	3.6	.7
27...	.00	.23	.23	.64	.02	.00	4.2	.8
30...	.00	.10	.10	.53	.01	.00	2.9	.6
SEP								
03...	.02	.24	.26	1.4	.04	.01	3.8	.6
06...	.01	.32	.33	.73	.02	.00	--	.4
10...	.02	.48	.50	1.3	.00	.00	3.4	.6
13...	.03	.00	.00	1.0	.00	.00	2.4	.8
16...	.00	.45	.45	1.4	.03	.00	4.6	.8
17...	.00	.38	.38	1.2	.03	.00	8.0	1.6
19...	.00	.38	.38	1.5	.00	.01	4.2	.6
22...	.07	.32	.39	1.5	.03	.04	3.9	.4
27...	.05	.14	.19	1.1	.02	.02	4.1	.6

01527000 COHOCTON RIVER AT COHOCTON, NY--Continued

SUSPENDED SEDIMENT, PERIOD MARCH TO SEPTEMBER 1980

DAY	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1											---	---
2											---	---
3											---	---
4											---	---
5											---	---
6											---	---
7											---	---
8											---	---
9											---	---
10											---	---
11											---	---
12											---	---
13											---	---
14											---	---
15											---	---
16											---	---
17											---	---
18											---	---
19											---	---
20											---	---
21											385	242
22											164	108
23											57	38
24											24	16
25											---	---
26											---	---
27											---	---
28											---	---
29											---	---
30											---	---
31											---	---
TOTAL											---	---

DAY	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	17	15	11	3.1	7	.47	3	.15	3	.06	2	.03
2	16	15	9	2.4	6	.37	4	.16	5	.11	9	.24
3	9	7.8	9	2.2	8	.52	2	.07	23	1.1	18	.68
4	8	6.0	13	2.8	8	.54	3	.11	10	.49	4	.13
5	8	5.2	13	2.5	6	.34	3	.10	3	.09	3	.07
6	9	5.0	10	1.8	7	.38	5	.20	2	.05	3	.07
7	6	2.8	10	1.7	6	.32	2	.06	2	.05	2	.04
8	6	2.3	8	1.3	8	.50	2	.06	4	.11	2	.04
9	13	4.7	8	1.2	6	.39	2	.06	2	.05	1	.02
10	24	9.3	7	.95	3	.19	5	.15	2	.05	4	.08
11	7	2.7	9	1.1	3	.17	9	.36	4	.11	4	.08
12	6	2.1	11	1.4	4	.21	4	.11	5	.19	3	.06
13	5	1.6	11	1.4	4	.19	4	.10	2	.06	2	.04
14	7	2.2	10	1.3	4	.18	1	.02	1	.02	19	.56
15	7	2.3	6	.75	3	.13	6	.19	6	.18	15	.73
16	4	1.4	6	.66	9	.56	3	.08	5	.15	7	.30
17	4	1.3	11	1.1	6	.32	5	.12	4	.09	6	.23
18	5	1.6	10	.95	3	.14	2	.05	5	.10	4	.14
19	10	2.9	9	.87	2	.08	3	.06	2	.04	1	.03
20	5	1.4	10	.92	2	.09	5	.12	3	.06	2	.05
21	6	1.5	8	.69	3	.15	3	.08	6	.11	3	.08
22	7	1.6	10	.81	3	.12	1	.02	3	.05	5	.13
23	7	1.5	9	.68	3	.11	1	.02	3	.05	1	.03
24	8	1.5	8	.58	3	.11	2	.05	4	.06	0	.00
25	8	1.5	9	.63	3	.11	4	.10	5	.07	1	.02
26	5	.86	7	.47	2	.06	1	.02	3	.04	1	.02
27	4	.65	7	.43	4	.13	1	.02	3	.04	0	.00
28	20	3.7	7	.43	3	.10	1	.02	4	.06	1	.02
29	20	4.8	7	.43	13	.67	1	.02	3	.04	2	.05
30	10	2.9	6	.36	5	.27	2	.05	3	.04	0	.00
31	---	---	7	.49	---	---	1	.02	1	.01	---	---
TOTAL	---	113.11	---	36.40	---	7.92	---	2.75	---	3.73	---	3.97

01527050 SWITZER CREEK NEAR COHOCTON, NY

LOCATION.--Lat 42°29'28", long 77°29'09", Steuben County, Hydrologic Unit 02050105, on left bank adjacent to unnamed dirt road approximately 0.5 mi (0.8 km) north of intersection with State Highway 415, 0.5 mi (0.8 km) upstream from mouth, and 0.8 mi (1.3 km) southeast of Cohocton. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3.45 mi^2 (8.96 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1978 to current year (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 1,320 ft (402 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 112 ft^3/s (3.17 m^3/s) Mar. 5, 1979, gage height, 4.08 ft (1.244 m); minimum discharge, 0.31 ft^3/s (0.009 m^3/s) many days during September 1980; minimum gage height, 2.23 ft (0.68 m) Dec. 25, 1979 (result of freeze-up).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 40 ft^3/s (1.13 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 25	1330	65	1.84	3.65	1.112	Apr. 1	1730	42	1.19	3.40	1.036
Mar. 21	1900	*105	2.97	*4.02	1.225						

Minimum daily discharge, 0.31 ft^3/s (0.009 m^3/s) many days in September; minimum gage height, 2.26 ft (0.69 m) many days in July and August.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.86	1.6	5.0	4.4	.60	.60	30	6.7	1.1	.78	.41	.41
2	.86	2.1	4.4	4.0	.60	.60	25	5.7	1.1	.71	.86	1.0
3	1.1	1.8	3.8	3.6	.60	.60	18	5.0	1.2	.64	1.3	.64
4	.86	1.8	3.5	2.4	.60	.60	16	4.6	1.0	.58	.71	.41
5	4.4	1.7	3.1	3.0	.60	.60	12	4.0	.94	.58	.52	.36
6	8.3	1.7	3.1	2.7	.60	.60	9.9	3.8	.94	.58	.46	.36
7	5.2	2.0	3.0	2.5	.60	.80	8.3	3.5	.94	.52	.46	.36
8	4.2	1.8	2.8	1.6	.60	3.5	7.4	3.0	1.3	.52	.78	.36
9	4.4	1.8	2.5	1.4	.60	3.3	8.6	2.7	1.1	.52	.52	.36
10	3.6	1.8	2.5	1.2	.60	6.4	12	2.5	1.0	.46	.46	.36
11	3.5	1.6	2.5	1.4	.60	6.2	9.9	2.4	.86	.46	1.3	.36
12	3.3	1.5	2.5	.80	.60	3.0	9.2	2.2	.78	.52	.71	.31
13	3.0	1.6	2.4	1.0	.60	2.8	7.7	2.2	.71	.46	.52	.31
14	2.7	1.6	2.2	1.6	.60	2.7	8.0	2.2	.71	.41	.52	1.2
15	2.5	1.6	2.2	1.8	.60	2.5	9.2	2.0	.86	.41	.78	.86
16	2.4	1.6	2.0	1.7	.60	2.4	8.6	1.7	1.0	.41	.52	.52
17	2.1	1.5	1.4	1.6	.60	12	7.7	1.6	.86	.41	.46	.58
18	2.0	1.5	1.4	1.5	.60	15	6.9	1.7	.78	.46	.41	.58
19	1.8	1.5	1.8	1.4	.60	12	5.9	1.6	.71	.41	.41	.41
20	1.7	1.4	1.7	1.0	.60	14	5.5	1.5	.94	.41	.41	.41
21	1.7	1.4	1.7	1.0	.71	35	4.8	1.4	.78	.41	.41	.36
22	1.7	1.4	1.7	.80	.78	19	4.4	1.3	.71	.46	.41	.36
23	2.2	1.4	2.1	.80	1.4	9.2	4.0	1.3	.71	.46	.41	.36
24	2.4	1.4	4.4	.80	1.0	9.6	3.6	1.2	.64	.41	.41	.31
25	2.0	3.3	29	.80	.70	11	3.5	1.2	.64	.36	.41	.31
26	1.8	12	26	.80	.60	7.7	3.0	1.2	.58	.41	.41	.41
27	1.7	15	15	.80	.60	7.4	2.8	1.1	.58	.41	.41	.31
28	2.1	11	9.9	.80	.60	8.3	5.2	1.1	.78	.41	.41	.31
29	1.8	7.7	7.7	.80	.60	22	7.2	1.0	1.0	.41	.41	.31
30	1.7	6.2	6.2	.80	---	21	7.2	1.2	1.0	.41	.41	.31
31	1.6	---	5.0	.80	---	31	---	1.2	---	.41	.46	---
TOTAL	79.48	94.3	162.5	49.60	18.99	271.40	271.5	73.8	26.25	14.81	17.08	13.51
MEAN	2.56	3.14	5.24	1.60	.65	8.75	9.05	2.38	.88	.48	.55	.45
MAX	8.3	15	29	4.4	1.4	35	30	6.7	1.3	.78	1.3	1.2
MIN	.86	1.4	1.4	.80	.60	.60	2.8	1.0	.58	.36	.41	.31
CFSM	.74	.91	1.51	.46	.19	2.53	2.62	.69	.25	.14	.16	.13
IN.	.85	1.01	1.75	.53	.20	2.92	2.92	.79	.28	.16	.18	.15

CAL YR 1979 TOTAL 1701.36 MEAN 4.66 MAX 84 MIN .42 CFSM 1.35 IN 18.29
WTR YR 1980 TOTAL 1093.22 MEAN 2.99 MAX 35 MIN .31 CFSM .86 IN 11.75

01527050 SWITZER CREEK NEAR COHOCTON, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1978 to September 1980 (discontinued).
ORGANIC DATA: OC--1980 (e).
NUTRIENT DATA: 1980 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: November 1978 to September 1980 (discontinued).

REVISIONS.--Revised figures for mean daily sediment concentration and daily sediment discharge for the period November 1978 to September 1979, superseding those previously published in the report for 1979 are published on page 241 of this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 1310 mg/L Mar. 21, 1980; minimum daily mean, 0 mg/L on many days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 290 tons (263 Mg) Mar. 5, 1979; minimum daily, 0.00 tons (0.00 Mg) on many days.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,310 mg/L Mar. 21; minimum daily mean, 0 mg/L on many days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 188 tons (171 Mg) Mar. 21; minimum daily, 0.00 tons (0.00 Mg) on many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT							
03...	1700	1.4	--	--	--	.87	.05
05...	1500	2.7	--	--	--	.62	.01
10...	1030	3.6	--	--	--	2.6	.00
13...	1230	3.0	--	--	--	2.6	.00
15...	0930	2.5	--	--	--	2.2	.00
16...	1100	2.2	270	7.4	8.5	2.0	.00
18...	1330	2.0	--	--	--	1.8	.00
25...	1100	2.0	--	--	--	1.3	.00
27...	1000	1.7	--	--	--	1.3	.00
31...	0930	1.6	--	--	--	1.5	.04
NOV							
03...	0930	1.8	--	--	--	1.4	.04
07...	1500	2.0	--	--	--	1.5	.00
10...	1030	1.8	--	--	--	1.5	.00
14...	1130	1.6	--	--	--	1.2	.02
15...	1100	1.6	270	7.4	2.0	1.6	.03
17...	1030	1.5	--	--	--	1.6	.02
20...	1330	1.4	--	--	--	2.7	.00
28...	0900	11	--	--	--	13	.05
DEC							
01...	1030	5.0	--	--	--	9.7	.06
05...	1130	3.1	--	--	--	3.1	.06
08...	1530	2.8	--	--	--	2.6	.06
12...	0930	2.5	--	--	--	1.8	.00
15...	1430	2.2	--	--	--	1.8	.00
18...	1200	2.0	235	7.4	.5	2.3	.04
19...	1200	1.8	--	--	--	.85	.00
22...	1130	1.7	--	--	--	2.2	.00
27...	1130	15	--	--	--	3.0	.01
29...	1200	7.4	--	--	--	9.4	.01
JAN							
02...	1400	4.0	--	--	--	.40	.01
05...	1030	3.0	--	--	--	4.1	.01
10...	1100	1.3	--	--	--	.39	.07
12...	1530	1.8	--	--	--	2.4	.07
15...	1130	1.7	--	--	--	2.6	.00
17...	1130	1.6	270	7.8	3.0	2.1	.01
19...	1000	1.4	--	--	--	2.4	.00
23...	1100	.90	--	--	--	1.6	.00
26...	1100	.80	--	--	--	2.9	.65
30...	0930	.80	--	--	--	1.9	.05
FEB							
01...	1000	.80	--	--	--	1.4	.05
05...	0900	.60	--	--	--	.69	.02
08...	0830	.60	--	--	--	.97	.02
12...	0900	.60	--	--	--	1.1	.00
14...	1130	.63	275	7.9	2.0	1.5	.01
15...	0900	--	--	--	--	1.3	.00

01527050 SWITZER CREEK NEAR COHOCTON, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
FEB							
15...	1900	.60	--	--	--	--	--
18...	0830	.60	--	--	--	.74	.00
22...	0900	.60	--	--	--	1.5	.00
23...	0800	--	--	--	--	1.0	.11
23...	1130	--	--	--	--	--	--
25...	1630	.80	--	--	--	1.3	.00
29...	0930	.60	--	--	--	1.3	.00
MAR							
05...	1330	.60	--	--	--	1.3	.01
08...	1200	4.0	--	--	--	1.6	.35
12...	1000	3.0	--	--	--	1.8	.01
18...	0945	14	--	--	2.5	1.6	.17
18...	0950	14	--	--	2.5	1.4	.27
18...	1045	12	135	7.1	2.5	1.6	.17
18...	1050	12	--	--	2.5	1.6	.25
18...	1200	10	--	--	2.5	1.7	.16
19...	0930	7.4	--	--	--	1.8	.04
19...	0931	7.4	--	--	--	1.8	.04
19...	1530	17	--	--	--	1.4	.12
21...	1225	36	--	--	--	1.6	.61
21...	1230	39	--	--	--	1.6	.35
21...	1300	45	--	--	--	1.5	.18
21...	1325	54	--	--	--	1.5	.45
21...	1330	55	--	--	--	1.4	.23
21...	1400	57	--	--	--	1.5	.28
21...	1425	56	--	--	--	1.6	.32
22...	1230	17	--	--	--	1.7	.04
26...	1000	7.7	--	--	--	2.0	.03
29...	0800	19	--	--	--	2.3	.09
29...	1630	36	--	--	--	2.5	.16
31...	0900	39	--	--	--	2.0	.10
31...	1200	34	--	--	--	2.5	.07
31...	1430	39	--	--	--	2.6	.10
APR							
01...	1000	24	--	--	--	2.9	.01
02...	1000	25	--	--	--	3.5	.01
03...	0830	18	--	--	--	2.6	.01
05...	0830	13	--	--	--	2.9	.00
09...	0830	7.7	--	--	--	1.7	.01
12...	1100	9.9	--	--	--	2.7	.07
16...	1500	8.6	--	--	--	2.4	.01
19...	1030	6.2	--	--	--	2.2	.03
23...	1130	4.0	--	--	--	2.5	.01
26...	1430	3.0	--	--	--	1.8	.00
30...	1500	7.2	--	--	--	1.9	.01
MAY							
02...	1030	6.1	181	7.4	8.0	2.3	.01
03...	0930	5.2	--	--	--	1.7	.01
07...	1230	3.5	--	--	--	1.1	.01
10...	0930	2.5	--	--	--	2.1	.00
13...	0930	2.5	--	--	--	1.8	.03
16...	1100	1.7	--	--	--	1.5	.03
21...	1100	1.5	--	--	--	1.2	.00
24...	1800	1.2	--	--	--	.94	.09
28...	1130	1.1	--	--	--	1.0	.00
31...	1030	1.2	--	--	--	1.0	.00
JUN							
04...	1100	1.1	--	--	--	.94	.00
06...	1030	.98	--	--	--	.93	.00
07...	0900	.90	--	--	--	1.0	.00
11...	1130	.90	--	--	--	1.0	.01
14...	1000	.70	--	--	--	.95	.00
18...	0930	.80	--	--	--	.93	.00
21...	0900	.80	--	--	--	.75	.01
25...	1000	.60	--	--	--	.91	.01
28...	0930	.60	--	--	--	.91	.01
JUL							
01...	1700	.70	--	--	--	.88	.00
02...	1000	.68	320	7.3	15.0	.92	.03
05...	1400	.60	--	--	--	.63	.00
09...	1400	.50	--	--	--	.85	.01
12...	1100	.50	--	--	--	.90	.01

01527050 SWITZER CREEK NEAR COHOCTON, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
JUL							
23...	1100	.50	--	--	--	.90	.01
26...	1000	.40	--	--	--	.93	.01
30...	1100	.40	--	--	--	.75	.00
AUG							
02...	1600	.90	--	--	--	1.3	.01
05...	1130	.60	--	--	--	.42	.00
06...	1030	.49	146	7.2	21.0	.70	.00
07...	1700	.50	--	--	--	.96	.00
13...	1000	.60	--	--	--	.66	.01
16...	0930	.60	--	--	--	.46	.06
20...	1200	.40	--	--	--	.77	.03
23...	1730	.40	--	--	--	.95	.02
27...	1100	.40	--	--	--	.95	.00
30...	1200	.40	--	--	--	.42	.00
SEP							
03...	1130	.60	--	--	--	.76	.01
06...	1130	.40	--	--	--	.90	.00
10...	0930	.40	--	--	--	.90	.01
13...	1130	.30	--	--	--	.91	.02
16...	1100	.50	--	--	--	.87	.00
17...	1030	.43	327	7.7	12.5	.92	.00
19...	0830	.50	--	--	--	.95	.00
22...	1000	.36	--	--	--	1.0	.03
27...	1030	.31	--	--	--	1.1	.04

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT							
03...	.48	.53	1.4	.03	.01	2.2	.4
05...	.52	.53	1.2	.06	.01	4.0	1.6
10...	.31	.31	2.9	.03	.01	5.7	.6
13...	.15	.15	2.8	.02	.01	4.3	.2
15...	.33	.33	2.5	.02	.02	3.9	.1
16...	.74	.74	2.7	.02	.00	4.3	.5
18...	.80	.80	2.6	.02	.01	2.0	.2
25...	.40	.40	1.7	.03	.01	1.7	.3
27...	.31	.31	1.6	.01	.00	2.0	.2
31...	.55	.59	2.1	.01	.00	3.1	.3
NOV							
03...	1.5	1.5	2.9	.06	.01	3.6	.3
07...	.17	.17	1.7	.01	.00	2.8	.4
10...	.18	.18	1.7	.01	.00	2.5	.4
14...	.17	.19	1.4	.02	.01	1.5	.2
15...	.33	.36	2.0	.01	.00	6.4	.9
17...	.40	.42	2.0	.01	.01	1.7	.3
20...	.11	.11	2.8	.01	.01	3.2	.4
28...	.34	.39	13	.03	.01	4.7	.6
DEC							
01...	.51	.57	10	.02	.01	2.0	.4
05...	.14	.20	3.3	.02	.00	1.7	.4
08...	.28	.34	2.9	.03	.01	1.7	.4
12...	.31	.31	2.1	.02	.01	2.3	.4
15...	.06	.06	1.9	.02	.01	2.0	.4
18...	.18	.22	2.5	.02	.01	14	.3
19...	.07	.07	.92	.01	.03	2.8	.3
22...	.10	.10	2.3	.01	.01	1.8	.3
27...	.32	.33	3.3	.04	.01	2.1	.6
29...	.39	.40	9.8	.03	.01	2.5	.7
JAN							
02...	.20	.21	.61	.02	.02	1.2	.4
05...	.29	.30	4.4	.02	.02	5.1	.5
10...	.13	.20	.59	.02	.01	1.5	.1
12...	.10	.17	2.6	.02	.03	3.0	1.0
15...	.20	.20	2.8	.02	.00	1.3	.4
17...	.00	.00	2.1	.02	.00	19	1.4
19...	.32	.32	2.7	.01	.00	5.2	.4
23...	.52	.52	2.1	.02	.00	3.9	.2
26...	.26	.91	3.8	.02	.01	2.4	.3
30...	.06	.11	2.0	.01	.02	2.0	.6

01527050 SWITZER CREEK NEAR COHOCTON, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED (MG/L AS C)
FEB							
01...	.05	.10	1.5	.01	.02	4.8	.6
05...	.10	.12	.81	.01	.00	1.9	.4
08...	.06	.08	1.1	.01	.00	.5	.5
12...	.23	.23	1.3	.01	.01	.8	.2
14...	.20	.21	1.7	.02	.00	3.5	.7
15...	.29	.29	1.6	.01	.01	.8	.1
15...	--	--	--	-	--	--	--
18...	.07	.07	.81	.02	.00	1.0	.2
22...	.11	.11	1.6	.01	.00	2.0	.2
23...	.85	.96	2.0	.07	.00	3.5	.8
23...	--	--	--	-	.00	6.6	.5
25...	.20	.20	1.5	.02	.00	1.8	.4
29...	.20	.20	1.5	.01	.00	.9	--
MAR							
05...	.10	.11	1.4	.02	.01	1.2	.3
08...	.95	1.3	2.9	.10	.03	6.2	12
12...	.18	.19	2.0	.04	.04	4.8	.3
18...	.57	.74	2.3	.13	.02	52	1.6
18...	.14	.41	1.8	.37	.05	--	--
18...	.39	.56	2.2	.12	.02	3.6	1.8
18...	.33	.58	2.2	.16	--	--	--
18...	.33	.49	2.2	.16	.12	--	--
19...	.37	.41	2.2	.11	.03	2.6	.8
19...	.16	.20	2.0	.08	.02	2.8	.8
19...	1.6	1.7	3.1	.46	.01	4.9	16
21...	3.6	4.2	5.8	1.10	.06	--	--
21...	2.6	2.9	4.5	1.20	.10	24	>20
21...	3.5	3.7	5.2	1.40	.06	8.4	>20
21...	9.4	9.8	11	1.60	.12	--	--
21...	5.0	5.2	6.6	1.10	.03	13	>20
21...	4.3	4.6	6.1	1.00	.02	14	>20
21...	5	15	17	1.40	.11	--	--
22...	.30	.34	2.0	.07	.01	2.9	1.2
26...	.22	.25	2.3	.04	.00	3.0	.4
29...	.81	.90	3.2	.19	.02	3.7	2.3
29...	1.8	2.0	4.5	.21	.03	4.9	7.0
31...	1.2	1.3	3.3	.39	.06	3.9	4.2
31...	.76	.83	3.3	.14	.05	4.0	1.7
31...	.39	.49	3.1	.25	.05	5.8	3.3
APR							
01...	.39	.40	3.3	.06	.01	2.9	1.0
02...	.36	.37	3.9	.08	.00	3.4	1.1
03...	.44	.45	3.1	.04	.02	4.3	.8
05...	.33	.33	3.2	.07	.00	3.2	.8
09...	.42	.43	2.1	.02	.01	4.8	1.0
12...	.13	.20	2.9	.03	.04	5.2	1.1
16...	.11	.12	2.5	.03	.01	6.9	.5
19...	.18	.21	2.4	.02	.00	1.6	.5
23...	.25	.26	2.8	.02	.00	1.9	--
26...	.03	.03	1.8	.04	.00	2.2	.6
30...	.17	.18	2.1	.03	.01	5.4	1.0
MAY							
02...	.07	.08	2.4	.02	.04	38	1.7
03...	.05	.06	1.8	.03	.01	4.6	1.6
07...	.28	.29	1.4	.03	.00	2.6	1.0
10...	.06	.06	2.2	.02	.01	4.5	.6
13...	.00	.02	1.8	.02	.03	2.6	.4
16...	.05	.08	1.6	.01	.03	2.0	.3
21...	.31	.31	1.5	.02	.06	2.1	.2
24...	.20	.29	1.2	.04	.12	3.1	--
28...	.12	.12	1.1	.02	.12	2.3	--
31...	.14	.14	1.1	.02	.03	4.0	1.0
JUN							
04...	.11	.11	1.1	.02	.00	2.8	.3
06...	.31	.31	1.2	.06	.06	7.0	1.1
07...	.24	.24	1.2	.02	.00	1.4	.2
11...	.15	.16	1.2	.02	.03	9.5	.4
14...	.12	.12	1.1	.01	.03	1.9	.4
18...	.13	.13	1.1	.02	.01	4.9	.2
21...	.07	.08	.83	.02	.01	1.3	.2
25...	.10	.11	1.0	.02	.00	3.6	.0
28...	.16	.17	1.1	.02	.00	8.0	.1

01527050 SWITZER CREEK NEAR COHOCTON, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
JUL							
01...	.06	.06	.94	.03	.00	1.3	--
02...	.03	.06	.98	.05	.00	50	.5
05...	.01	.01	.64	.02	.00	1.0	--
09...	.06	.07	.92	.01	.01	7.4	.4
12...	.02	.03	.93	.02	.01	.6	1.0
16...	.02	.02	.91	.02	.00	6.0	.4
19...	.02	.02	.81	.02	.01	2.3	.5
23...	.07	.08	.98	.01	.00	1.1	.7
26...	.00	.01	.94	.02	.00	2.1	.6
30...	.16	.16	.91	.02	.01	2.0	.7
AUG							
02...	.24	.25	1.6	.03	.01	3.4	.6
05...	.08	.08	.50	.04	.00	1.4	.3
06...	.01	.01	.71	.03	.02	2.0	.4
07...	.05	.05	1.0	.03	.00	5.9	--
13...	.03	.04	.70	.03	.03	2.2	.4
16...	.01	.07	.53	.02	.04	4.5	.3
20...	.00	.01	.78	.00	.01	7.8	.5
23...	.00	.00	.95	.01	.01	1.1	.5
27...	.03	.03	.98	.02	.00	.9	.4
30...	.04	.04	.46	.04	.00	1.1	.7
SEP							
03...	.24	.25	1.0	.02	.01	4.8	.5
06...	.04	.04	.94	.01	.01	5.0	.4
10...	.18	.19	1.1	.00	.01	21	.5
13...	.22	.24	1.2	.00	.00	1.7	.6
16...	.09	.09	.96	.00	.01	1.9	.8
17...	.10	.10	1.0	.03	.01	2.6	1.3
19...	.08	.08	1.0	.00	.01	1.2	.5
22...	.00	.02	1.0	.02	.02	1.1	.6
27...	.18	.22	1.3	.03	.03	1.1	.5

423132077280800 SWITZER CREEK PRECIPITATION STATION a/

CHEMICAL QUALITY OF PRECIPITATION, OCTOBER TO DECEMBER 1979

DATE	PRECIP-ITATION DAILY (IN)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)
OCT								
05...	1.6	.17	.14	.38	.52	.69	.010	--
NOV								
26...	.91	.97	.07	.35	.42	1.4	.010	.00
DEC								
24...	--	.19	.08	.42	.50	.69	.010	.06

a/ The precipitation collector is located 150 ft (45.7 m) east of State Highway 371, 2.1 mi (3.4 km) northeast of intersection of State Highway 371 with U.S. Highway 15 and 2.5 mi (4.0 km) northeast of gaging station.

01527050 SWITZER CREEK NEAR COHOCTON, NY--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2	.00	4	.02	3	.04	4	.05	6	.00	7	.01
2	4	.00	4	.02	1	.01	7	.08	4	.00	2	.00
3	4	.01	2	.00	0	.00	4	.04	3	.00	2	.00
4	2	.00	3	.01	0	.00	11	.07	3	.00	2	.00
5	25	.64	3	.01	0	.00	2	.02	2	.00	2	.00
6	19	.43	2	.00	1	.00	1	.00	3	.00	2	.00
7	7	.10	2	.01	2	.02	1	.00	3	.00	2	.00
8	3	.03	2	.00	1	.00	0	.00	1	.00	29	.35
9	4	.05	3	.01	0	.00	2	.00	1	.00	14	.12
10	3	.03	3	.01	0	.00	6	.02	1	.00	265	12
11	1	.00	3	.01	0	.00	4	.02	1	.00	166	5.8
12	1	.00	4	.02	0	.00	4	.00	2	.00	13	.11
13	0	.00	3	.01	1	.00	2	.00	2	.00	6	.05
14	1	.00	4	.02	1	.00	2	.00	2	.00	2	.01
15	2	.01	4	.02	4	.02	0	.00	2	.00	2	.01
16	2	.01	3	.01	2	.01	0	.00	3	.00	12	.08
17	4	.02	3	.01	13	.05	0	.00	2	.00	1140	93
18	4	.02	2	.00	10	.04	1	.00	1	.00	369	26
19	3	.01	2	.00	2	.00	2	.00	2	.00	247	13
20	4	.02	5	.02	0	.00	1	.00	1	.00	236	12
21	3	.01	4	.02	0	.00	1	.00	1	.00	1310	188
22	4	.02	4	.02	0	.00	2	.00	1	.00	346	26
23	8	.05	4	.02	1	.00	1	.00	9	.03	30	.75
24	9	.06	4	.02	14	.21	2	.00	2	.00	111	4.1
25	4	.02	98	1.4	219	20	1	.00	2	.00	56	1.9
26	3	.01	247	16	42	3.4	1	.00	2	.00	15	.31
27	1	.00	80	3.2	11	.45	1	.00	1	.00	5	.11
28	2	.01	11	.33	10	.27	1	.00	1	.00	30	.67
29	2	.00	8	.17	7	.15	1	.00	4	.00	254	17
30	2	.00	5	.08	6	.10	2	.00	---	---	67	4.2
31	2	.00	---	---	5	.07	2	.00	---	---	200	19
TOTAL	---	1.56	---	18.27	---	207.80	---	0.30	---	0.03	---	424.47

DAY	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	106	9.3	11	.20	3	.00	1	.00	5	.00	2	.00
2	55	3.9	8	.12	5	.01	3	.00	13	.06	7	.02
3	28	1.4	7	.09	6	.02	2	.00	20	.09	3	.00
4	24	1.0	9	.11	5	.01	1	.00	9	.02	3	.00
5	19	.62	8	.09	4	.01	1	.00	5	.00	2	.00
6	16	.43	8	.08	3	.00	1	.00	1	.00	2	.00
7	15	.34	9	.09	4	.01	1	.00	2	.00	3	.00
8	15	.30	9	.07	7	.02	1	.00	3	.00	5	.00
9	20	.46	6	.04	3	.00	1	.00	5	.00	5	.00
10	14	.45	4	.03	3	.00	2	.00	4	.00	1	.00
11	14	.37	6	.04	3	.00	1	.00	54	.28	0	.00
12	14	.35	5	.03	4	.00	2	.00	7	.01	1	.00
13	13	.27	8	.05	4	.00	2	.00	4	.00	0	.00
14	15	.32	7	.04	4	.00	1	.00	4	.00	17	.06
15	14	.35	4	.02	6	.01	1	.00	10	.02	15	.03
16	10	.23	5	.02	7	.02	1	.00	5	.00	7	.00
17	8	.17	7	.03	3	.00	1	.00	4	.00	5	.00
18	6	.11	6	.03	2	.00	1	.00	4	.00	4	.00
19	6	.10	8	.03	3	.00	1	.00	4	.00	5	.00
20	9	.13	6	.02	3	.00	1	.00	4	.00	1	.00
21	9	.12	5	.02	4	.00	1	.00	3	.00	1	.00
22	8	.10	6	.02	4	.00	1	.00	5	.00	1	.00
23	9	.10	9	.03	4	.00	2	.00	4	.00	2	.00
24	9	.09	9	.03	4	.00	1	.00	3	.00	1	.00
25	6	.06	6	.02	3	.00	1	.00	3	.00	2	.00
26	6	.05	7	.02	5	.00	1	.00	3	.00	1	.00
27	6	.05	6	.02	6	.00	1	.00	2	.00	0	.00
28	26	.47	5	.01	5	.01	1	.00	2	.00	1	.00
29	33	.63	6	.02	6	.02	1	.00	4	.00	0	.00
30	18	.35	6	.02	3	.00	1	.00	3	.00	0	.00
31	---	---	6	.02	---	---	1	.00	2	.00	---	---
TOTAL	---	18.72	---	1.46	---	0.14	---	0.00	---	0.48	---	0.11

01528000 FIVEMILE CREEK NEAR KANONA, NY

LOCATION.--Lat 42°23'18", long 77°21'29", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from town of Wheeler highway bridge, 1.3 mi (2.1 km) upstream from mouth and Kanona.

DRAINAGE AREA.--66.8 mi^2 (173 km^2).

PERIOD OF RECORD.--February 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,170.30 ft (356.707 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--43 years, 76.2 ft^3/s (2.158 m^3/s), 15.49 in/yr (393 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,110 ft^3/s (145 m^3/s) June 23, 1972, gage height, 6.95 ft (2.118 m) present datum; maximum gage height, 7.10 ft (2.164 m) present datum, Mar. 31, 1940 (ice jam); minimum discharge, 0.04 ft^3/s (0.001 m^3/s) Sept. 27, 29, 1941; minimum gage height, 0.68 ft (0.207 m) Aug. 29, 30, Sept. 11, 12, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 880 ft^3/s (24.9 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	1845	1,180	33.4	4.58	1.396	Mar. 21	2300	*1,340	37.9	*4.78	1.457
Dec. 25	1730	1,100	31.2	4.47	1.362						

Minimum discharge, 1.6 ft^3/s (0.45 m^3/s) Aug. 29, 30, Sept. 11, 12, 14; minimum gage height, 0.68 ft (0.207 m) Aug. 29, 30, Sept. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	31	106	78	17	19	740	191	29	13	3.1	5.1
2	17	57	87	70	17	18	666	133	24	10	5.0	5.5
3	16	90	76	60	16	18	417	102	14	8.3	15	9.2
4	25	66	73	54	16	19	304	89	11	7.2	11	7.1
5	130	50	70	50	16	21	266	74	10	14	6.7	7.3
6	728	42	78	47	16	25	183	65	8.9	11	5.1	4.7
7	287	42	85	44	15	30	145	59	8.8	8.1	4.1	3.3
8	127	47	77	42	15	50	123	52	9.6	6.1	5.2	2.6
9	110	47	62	39	15	72	136	45	12	5.6	3.8	2.3
10	107	56	53	38	15	110	273	41	16	5.5	3.3	2.1
11	84	51	56	36	15	350	180	40	11	5.1	5.1	1.9
12	70	44	54	34	14	230	151	41	8.5	4.8	4.9	1.8
13	58	41	53	32	14	170	146	42	7.3	4.2	4.1	1.8
14	48	49	49	31	14	110	168	44	6.9	6.0	4.0	3.8
15	45	47	44	29	14	80	495	39	6.6	5.5	8.8	9.3
16	43	47	40	27	13	62	270	34	10	4.2	5.6	5.7
17	38	49	39	26	13	70	167	33	7.6	3.5	4.1	4.1
18	33	45	38	25	12	150	139	33	6.3	3.3	3.4	3.5
19	31	43	36	24	12	220	114	32	5.8	3.2	2.9	3.3
20	29	35	33	23	13	280	96	30	6.3	3.0	2.8	3.0
21	28	34	34	22	15	707	89	27	6.4	3.2	2.5	2.8
22	32	30	35	21	19	1150	71	24	18	3.3	2.4	2.5
23	33	30	47	20	26	564	65	21	18	3.1	3.8	2.1
24	38	34	176	20	34	300	59	20	7.6	3.0	4.0	2.1
25	39	65	792	19	26	463	58	19	5.1	2.8	2.8	2.1
26	33	569	816	19	24	268	54	17	4.4	2.5	2.2	2.3
27	30	880	323	18	22	185	48	15	4.2	2.6	2.0	3.3
28	42	362	160	18	19	204	219	15	4.3	2.6	1.9	3.3
29	47	170	130	17	19	410	589	14	8.7	3.6	1.8	2.5
30	40	123	111	17	---	557	356	21	12	4.6	2.8	2.1
31	35	---	95	17	---	621	---	14	---	4.1	6.4	---
TOTAL	2436	3276	3928	1017	496	7533	6787	1426	308.3	167.0	140.6	112.5
MEAN	78.6	109	127	32.8	17.1	243	226	46.0	10.3	5.39	4.54	3.75
MAX	728	880	816	78	34	1150	740	191	29	14	15	9.3
MIN	13	30	33	17	12	18	48	14	4.2	2.5	1.8	1.8
CFSM	1.18	1.63	1.90	.49	.26	3.64	3.38	.69	.15	.08	.07	.06
IN.	1.36	1.82	2.19	.57	.28	4.19	3.78	.79	.17	.09	.08	.06

CAL YR 1979 TOTAL 39810.0 MEAN 109 MAX 1800 MIN 3.7 CFSM 1.63 IN 22.17
WTR YR 1980 TOTAL 27627.4 MEAN 75.5 MAX 1150 MIN 1.8 CFSM 1.13 IN 15.39

01528700 DIVERSION FROM WANETA LAKE TO KEUKA LAKE AT KEUKA, NY

LOCATION.--Lat 42°29'06", long 77°06'39", Steuben County Hydrologic Unit 02050105, at entrance to conduit on Diversion Canal, 0.8 mi (1.3 km) east of Keuka, and 1.0 mi (1.6 km) north of Wayne.

DRAINAGE AREA.--45.5 mi² (118 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Daily power generation records.

REMARKS.--Records for March 1931 (when diversion and power generation began) to September 1966 on file. Sketch indicates diversion from Lamoka-Waneta Lakes (Susquehanna River Basin) to Keuka Lake (Oswego River Basin).

COOPERATION.--Records furnished by New York State Electric and Gas Corp.

AVERAGE DISCHARGE.--14 years, 24.4 ft³/s (0.691 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73 ft³/s (2.07 m³/s) June 23, 1972; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 69 ft³/s (1.95 m³/s) Nov. 29; no flow many days.

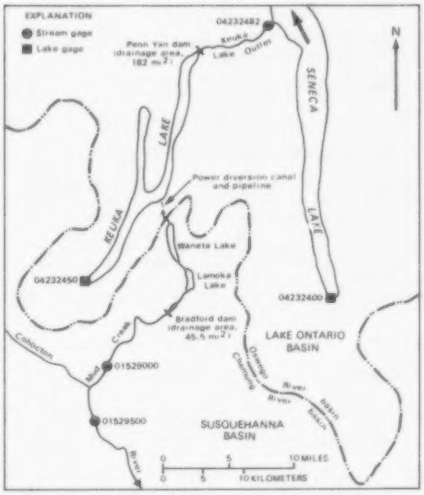
EXPLANATION
● Stream gage
■ Lake gage
04232482
Penn Yan dam (drainage area, 182 mi²)
Keuka Lake Outlet
N
SENECA LAKE
KEUKA LAKE
Power diversion canal and pipeline
Waneta Lake
Lamoka Lake
04232450
04232400
Bradford dam (drainage area, 45.5 mi²)
LAKE ONTARIO BASIN
Cohocton
Mud Creek
01529000
Oswego River basin
Chemung River basin
01529500
SUSQUEHANNA BASIN
River
0 5 10 MILES
0 5 10 KILOMETERS

Figure 8.--Gaging stations and transbasin diversion, Cohocton River-Keuka Lake area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	55	66	66	34	.00	68	68	.00	.00	.00	.00
2	55	55	66	66	34	.00	68	68	.00	.00	.00	.00
3	55	55	66	66	34	.00	68	68	.00	.00	.00	.00
4	55	55	66	66	34	.00	68	68	.00	.00	.00	.00
5	55	42	42	66	34	.00	68	68	.00	.00	.00	.00
6	55	42	24	66	34	.00	68	68	.00	.00	.00	.00
7	55	42	66	66	34	.00	68	68	.00	.00	.00	.00
8	55	42	.00	66	33	.00	68	68	.00	.00	.00	.00
9	55	42	.00	66	33	.00	68	68	.00	.00	.00	.00
10	55	42	.00	66	33	.00	68	68	.00	.00	.00	.00
11	55	42	.00	66	33	.00	68	68	12	.00	.00	.00
12	55	42	23	66	33	.00	12	68	.00	.00	.00	.00
13	55	42	36	66	33	.00	.00	68	.00	.00	.00	.00
14	55	42	36	60	33	.00	26	68	.00	.00	.00	.00
15	55	42	66	55	20	.00	68	68	.00	.00	.00	.00
16	55	42	66	55	.00	.00	68	68	.00	.00	.00	.00
17	55	42	66	55	.00	.00	68	68	.00	.00	.00	.00
18	55	42	66	48	.00	.00	68	68	.00	.00	.00	.00
19	55	42	66	42	19	.00	68	27	.00	.00	.00	.00
20	55	42	66	42	32	.00	68	.00	.00	.00	.00	.00
21	55	42	66	42	32	.00	68	.00	.00	.00	.00	.00
22	55	42	66	42	20	.00	68	.00	.00	.00	.00	.00
23	55	42	66	42	.00	.00	68	.00	.00	.00	.00	.00
24	40	42	66	42	.00	30	68	.00	.00	.00	.00	.00
25	39	42	66	42	20	66	66	.00	.00	.00	.00	.00
26	42	42	66	42	34	66	66	.00	.00	.00	.00	.00
27	42	21	66	42	15	66	66	.00	.00	.00	.00	.00
28	42	23	66	39	.00	68	66	.00	.00	.00	.00	.00
29	42	69	66	39	.00	68	66	.00	.00	.00	.00	.00
30	42	66	60	39	---	68	66	.00	.00	.00	.00	.00
31	55	---	66	39	---	68	---	.00	---	.00	.00	---
TOTAL	1609	1323	1607.00	1665	661.00	500.00	1862.00	1251.00	12.00	.00	.00	.00
MEAN	51.9	44.1	51.8	53.7	22.8	16.1	62.1	40.4	.40	.000	.000	.000
MAX	55	69	66	66	34	68	68	68	12	.00	.00	.00
MIN	39	21	.00	39	.00	.00	.00	.00	.00	.00	.00	.00

CAL YR 1979 TOTAL 5785.20 MEAN 15.8 MAX 69 MIN .00
WTR YR 1980 TOTAL 10490.00 MEAN 28.7 MAX 69 MIN .00

01529000 MUD CREEK NEAR SAVONA, NY

LOCATION.--Lat 42°18'30", long 77°11'50", Steuben County, Hydrologic Unit 02050105, on left bank just upstream from small tributary entering from east, 2.4 mi (3.9 km) upstream from Savona, and 3.3 mi (5.3 km) upstream from mouth.

DRAINAGE AREA.--76.6 mi^2 (198 km^2).

PERIOD OF RECORD.--July 1918 to December 1919 (published as "at Savona"), March 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,049.63 ft (319.927 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to December 1919, nonrecording gage at site 1.5 mi (2.4 km) downstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Lake Lamoka-Waneta System. Diversion table for station 01528700 represents discharge from 45.5 mi^2 (118 km^2) of drainage area from the Susquehanna River basin to the St. Lawrence River basin through the Keuka power diversion canal of New York State Electric and Gas Corp. Monthly records of diversion for March 1931 to September 1966 available in files of the Geological Survey.

COOPERATION.--Records of diversion furnished by New York State Electric and Gas Corp.

AVERAGE DISCHARGE.--43 years (1937-80), 42.1 ft^3/s (1.19 m^3/s) unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,100 ft^3/s (173 m^3/s) June 23, 1972, gage height, 8.66 ft (2.640 m), from rating curve extended above 1,350 ft^3/s (38.2 m^3/s) on basis of slope-area measurement of peak flow; minimum, 0.04 ft^3/s (0.001 m^3/s) Sept. 21-23, 1941, gage height, 0.53 ft (0.162 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 805 ft^3/s (22.8 m^3/s) Nov. 27, gage height, 4.80 ft (1.463 m); minimum, 1.3 ft^3/s (0.037 m^3/s) Sept. 25, 26; minimum gage height, 0.63 ft (0.192 m), Aug. 24, 25, 26, 27, 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	9.3	52	36	6.8	7.6	560	88	7.2	7.4	2.8	4.6
2	4.8	40	46	32	6.6	7.2	490	66	7.2	5.8	3.4	4.8
3	10	78	40	27	6.4	7.0	404	54	9.7	5.1	5.9	8.6
4	18	42	37	24	6.2	7.2	292	45	9.5	4.9	7.2	6.8
5	46	29	37	22	6.0	7.4	236	38	7.7	6.0	4.5	4.0
6	261	24	39	21	5.8	7.8	150	34	6.8	11	3.6	2.8
7	109	24	40	20	5.8	9.0	100	31	7.0	7.8	3.3	2.6
8	44	22	35	18	5.6	14	62	27	8.0	5.5	3.4	2.2
9	41	20	27	15	5.6	20	71	26	9.1	5.0	3.8	2.4
10	36	28	25	14	5.4	30	128	23	8.0	4.5	3.4	2.4
11	28	24	24	14	5.4	42	91	22	7.5	4.2	3.4	2.2
12	23	20	23	14	5.4	20	70	23	7.1	4.1	3.6	2.2
13	23	18	22	13	5.2	13	65	27	6.5	3.9	3.4	2.2
14	20	18	20	12	5.2	12	74	33	5.6	3.8	3.8	3.7
15	17	18	19	12	5.2	11	184	28	6.0	4.0	4.7	4.8
16	15	18	17	11	5.2	10	133	22	7.3	3.4	4.3	3.7
17	14	17	16	11	5.2	25	207	19	6.9	3.7	3.3	3.2
18	13	16	15	10	5.2	35	210	18	5.9	3.4	3.1	3.0
19	12	14	14	9.8	5.2	50	77	19	5.2	3.2	2.9	2.6
20	11	14	13	9.4	5.4	66	49	18	8.7	3.2	2.8	2.2
21	10	13	14	9.0	5.8	220	44	16	9.1	3.1	2.6	2.2
22	9.6	12	15	8.8	7.0	494	37	15	6.7	3.0	2.4	2.2
23	9.3	13	20	8.4	9.2	139	34	13	5.4	3.1	2.3	2.2
24	15	14	57	8.2	14	108	31	12	4.9	3.0	2.1	1.7
25	14	23	228	8.0	11	184	29	11	4.9	2.7	2.0	1.6
26	11	293	290	7.8	10	113	28	9.7	4.5	3.4	2.0	1.7
27	9.9	666	116	7.6	8.8	79	26	8.8	4.5	3.5	2.0	1.9
28	11	199	73	7.4	8.2	89	87	8.4	4.4	3.6	2.0	1.9
29	13	91	60	7.2	8.0	256	266	7.6	5.1	4.0	2.4	1.7
30	12	65	52	7.0	---	370	160	7.6	7.1	4.0	3.6	1.6
31	10	---	44	7.0	---	423	---	7.6	---	3.3	3.9	---
TOTAL	876.0	1882.3	1530	431.6	194.8	2876.2	4395	777.7	203.5	136.6	103.9	89.7
MEAN	28.3	62.7	49.4	13.9	6.72	92.8	147	25.1	6.78	4.41	3.35	2.99
MAX	261	666	290	36	14	494	560	88	9.7	11	7.2	8.6
MIN	4.8	9.3	13	7.0	5.2	7.0	26	7.6	4.4	2.7	2.0	1.6

CAL YR 1979 TOTAL 25963.4 MEAN 71.1 MAX 1040 MIN 2.8
WTR YR 1980 TOTAL 13497.3 MEAN 36.9 MAX 666 MIN 1.6

01529500 COHOCTON RIVER NEAR CAMPBELL, NY

LOCATION.--Lat 42°15'10", long 77°13'00", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from bridge on town road at junction with County Highway 125, 1.9 mi (3.1 km) upstream from Michigan Creek, and 2 mi (3 km) north of Campbell.

DRAINAGE AREA.--470 mi^2 (1,217 km^2).

PERIOD OF RECORD.--July 1918 to current year.

REVISED RECORDS.--WSP 891: 1935. WSP 1302: 1919-20(M), 1927-28(M), 1928-38 (monthly runoff). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,016.34 ft (309.780 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 5, 1937, nonrecording gage on highway bridge.

REMARKS.--Records fair. During each year since 1927, a large part of flow from 45.5 mi^2 (118 km^2) of drainage area upstream from Lake Lamoka on Mud Creek, a tributary upstream from this station, is diverted into Keuka Lake (Oswego River basin), for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--62 years, 450 ft^3/s (12.74 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,100 ft^3/s (1,160 m^3/s) July 8, 1935, gage height, 11.6 ft (3.54 m), from floodmark, from rating curve extended above 24,200 ft^3/s (685 m^3/s) on basis of velocity-area and slope-area measurements of peak flow; minimum, 8 ft^3/s (0.23 m^3/s) Sept. 6, 7, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,200 ft^3/s (119 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	1930	5,750	163	5.82	1.774
Mar. 21	2230	*6,450	183	*6.21	1.893

Minimum discharge, 34 ft^3/s (0.963 m^3/s) Sept. 24; gage height, 0.05 ft (0.015 m)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	200	647	614	100	120	3370	1170	162	134	45	55
2	100	317	578	561	100	110	2930	938	181	108	52	65
3	136	531	502	517	98	110	2250	842	167	94	196	131
4	218	371	481	404	96	120	1930	684	169	84	163	79
5	554	311	455	370	94	130	1660	591	151	90	105	65
6	2770	277	483	350	94	150	1300	533	138	137	80	57
7	1200	260	507	330	92	170	1060	500	136	99	69	50
8	713	280	469	310	90	210	905	446	145	84	71	45
9	664	270	401	290	90	320	988	412	161	80	71	40
10	592	320	368	270	90	540	1630	379	155	76	64	42
11	511	300	361	250	88	800	1210	355	143	72	64	40
12	436	260	356	240	88	380	1030	351	130	74	103	38
13	406	230	373	230	86	280	967	375	122	65	78	38
14	358	260	348	220	86	240	1040	434	115	62	72	58
15	322	260	321	200	86	220	2070	334	115	61	92	84
16	300	260	300	190	86	200	1430	331	137	64	94	72
17	274	259	270	180	84	300	1190	297	135	62	75	67
18	256	253	260	170	82	400	1110	292	114	57	65	65
19	241	239	250	160	80	560	884	289	105	55	59	61
20	229	224	240	150	100	1100	732	272	122	52	56	57
21	218	214	250	150	130	3030	657	249	123	52	52	54
22	205	208	270	140	170	4140	578	237	114	50	48	52
23	208	206	300	140	200	1880	533	219	124	52	45	48
24	252	216	761	130	250	1520	490	207	100	48	50	42
25	257	286	2770	130	200	2090	468	198	92	40	45	40
26	227	2780	2820	130	170	1380	440	187	87	42	40	43
27	207	3120	1660	120	150	1060	408	174	81	40	40	47
28	218	1630	1190	120	140	1110	1100	164	81	42	40	49
29	254	1040	991	110	130	2120	2470	165	97	55	40	45
30	231	803	848	110	---	2530	1680	165	145	60	45	40
31	209	---	714	110	---	3270	---	165	---	54	57	---
TOTAL	12871	16185	20544	7396	3350	30590	38510	12005	3847	2145	2176	1669
MEAN	415	540	663	239	116	987	1284	387	128	69.2	70.2	55.6
MAX	2770	3120	2820	614	250	4140	3370	1170	181	137	196	131
MIN	100	200	240	110	80	110	408	164	81	40	40	38

CAL YR 1979 TOTAL 213341 MEAN 584 MAX 7500 MIN 58
WTR YR 1980 TOTAL 151288 MEAN 413 MAX 4140 MIN 38

01529950 CHEMUNG RIVER AT CORNING, NY

LOCATION.--Lat 42°08'47", long 77°03'28", Steuben County, Hydrologic Unit 02050105, on right bank adjacent to Corning Glass Works power plant, 0.2 mi (0.3 km) upstream from bridge on State Highway 414 (Centerway) at Corning, and 1.7 mi.(2.7 km) downstream from Cohocton River.

DRAINAGE AREA.--2.006 mi^2 (5,196 km^2).

PERIOD OF RECORD.--Occasional discharge measurements water years 1941, 1968-69. October 1974 to current year.

REVISED RECORDS.--WRD NY-78-1: 1976, 1977(m).

GAGE.--Water-stage recorder. Datum of gage is 900.00 ft (274.320 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. High flows slightly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi^2 (118 km^2) of drainage area is diverted from Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--6 years, 2,394 ft^3/s (67.80 m^3/s), 16.21 in/yr (412 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 127,000 ft^3/s (3,600 m^3/s) Sept. 26, 1975, gage height, 32.46 ft (9.894 m); minimum 112 ft^3/s (3.17 m^3/s) Aug. 29, Sept. 25, 26, 30, 1980, gage height 14.25 ft (4.343 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of 40.71 ft (12.408 m), from floodmark (discharge 228,000 ft^3/s or 6,460 m^3/s), from peak flows determined at upstream and downstream stations adjusted for drainage area and channel storage.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 24,000 ft^3/s (680 m^3/s) and maximum (*):

		Discharge		Gage height		Date	Time	Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)			(ft^3/s)	(m^3/s)	(ft)	(m)
Nov. 26	2000	*34,700	983	*23.60	7.193	Mar. 21	2300	27,900	790	22.47	6.849

Minimum discharge, 112 ft^3/s (3.17 m^3/s) Aug. 29, Sept. 25, 26, 30, gage height, 14.25 ft (4.343 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	445	598	2990	2310	420	580	15400	4760	374	490	149	149
2	347	1580	2470	2010	400	520	12500	3880	381	417	157	161
3	530	4530	2040	1850	390	460	9140	3340	381	354	256	199
4	1650	2570	1920	1560	380	430	7080	2870	424	303	371	243
5	2510	1820	1790	1350	370	440	6730	2340	424	280	333	209
6	18500	1500	1750	1200	360	460	5390	2060	367	322	251	183
7	8470	1380	1820	1100	350	640	4300	1730	341	309	212	164
8	4200	1300	1730	1000	340	4490	3510	1490	347	309	197	151
9	3110	1210	1560	940	330	6280	4270	1340	381	303	196	145
10	2850	1260	1380	860	330	2420	8790	1250	395	291	202	144
11	2200	1320	1330	860	320	1960	7430	1160	374	328	184	138
12	1820	1140	1280	980	320	1450	5760	1140	361	286	194	135
13	1660	1020	1220	940	320	1150	4540	1180	341	261	194	132
14	1550	992	1650	900	310	996	4370	1680	315	243	197	141
15	1290	1000	1420	1200	310	1040	10200	1990	322	215	225	173
16	1150	953	1200	1100	310	1120	7940	1440	395	197	233	198
17	1020	913	960	940	310	1390	5420	1280	467	200	217	179
18	924	848	840	840	320	9210	4520	1190	381	185	199	167
19	851	798	820	880	320	6610	3620	939	328	175	183	161
20	783	751	800	800	360	5310	3090	905	347	162	172	152
21	731	704	840	740	400	10700	2890	950	361	166	166	145
22	689	678	1000	680	506	17600	2540	883	354	170	153	139
23	670	668	1180	720	1100	10500	1980	780	328	166	149	131
24	765	683	2400	680	1900	8860	1710	680	297	166	145	124
25	869	814	12500	600	1500	11700	1640	606	267	153	141	118
26	769	15100	15000	620	1100	8720	2010	546	243	153	137	118
27	687	20800	7970	640	790	5870	1520	498	220	153	126	124
28	670	10600	4990	600	730	4890	2830	460	199	149	119	120
29	703	6050	3780	560	680	9710	9860	431	231	170	116	120
30	687	3900	3190	520	---	12900	7620	417	490	204	130	118
31	637	---	2750	450	---	16100	---	410	---	175	141	---
TOTAL	63737	87480	86570	30430	15576	164506	168600	44625	10436	7455	5845	4581
MEAN	2056	2916	2793	982	537	5307	5620	1440	348	240	189	153
MAX	18500	20800	15000	2310	1900	17600	15400	4760	490	490	371	243
MIN	347	598	800	450	310	430	1520	410	199	149	116	118

CAL YR 1979 TOTAL 949352 MEAN 2601 MAX 39000 MIN 205
WTR YR 1980 TOTAL 689841 MEAN 1885 MAX 20800 MIN 116

01530500 NEWTOWN CREEK AT ELMIRA, NY

LOCATION.--Lat 42°06'16", long 76°47'54", Chemung County, Hydrologic Unit 02050105, on left bank 200 ft (61 m) downstream from bridge on Linden Place in Elmira, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--77.5 mi^2 (201 km^2).

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 1502: 1956. WSP 2103: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 838.35 ft (255.529 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Diurnal fluctuation at low flow caused by operations of sand and gravel plant and wastewater treatment plant upstream.

AVERAGE DISCHARGE.--42 years, 88.2 ft ^{3}/s (2.498 m^3/s), 15.45 in/yr (392 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 4,000 ft^3/s (113 m^3/s) June 23, 1972; maximum gage height, 19.28 ft (5.877 m) June 23, 1972, from floodmarks (backwater from Chemung River); minimum daily discharge, 4.1 ft^3/s (0.12 m^3/s) Aug. 17, 21, 22, 23, Sept. 21, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34.0 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Oct. 6	0345	1,380	39.1	10.59	3.228	Mar. 22	0100	1,960	55.5	12.51	3.813
Nov. 26	2045	*2,120	60.0	*13.02	3.968	Mar. 30	0015	1,510	42.8	11.03	3.362

Minimum daily discharge, 4.1 ft^3/s (0.12 m^3/s) Aug. 17, 21, 22, 23, Sept. 21; minimum gage height, 4.80 ft (1.463m), July 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	48	105	81	16	17	500	220	24	27	5.3	6.7
2	20	283	92	74	16	16	360	160	24	19	6.4	8.3
3	30	265	79	68	15	16	280	130	26	17	10	5.7
4	34	132	74	54	15	16	320	110	24	14	7.5	5.7
5	268	101	71	52	15	19	250	90	20	13	5.7	5.7
6	711	86	70	45	14	32	200	76	19	22	5.3	6.0
7	183	112	70	41	14	33	170	64	19	16	5.3	6.7
8	124	91	64	38	13	419	150	58	19	16	5.3	6.7
9	138	67	57	34	13	191	380	54	19	14	5.0	7.1
10	112	67	53	33	13	91	520	49	20	13	5.3	7.1
11	94	60	50	39	13	81	280	46	19	12	5.3	6.4
12	140	52	48	43	12	50	240	45	18	11	5.7	7.1
13	163	48	57	32	12	30	190	55	17	12	5.7	6.4
14	138	50	56	55	12	36	250	94	16	12	7.1	6.4
15	101	50	50	81	12	42	340	73	19	11	8.3	6.7
16	61	52	47	54	11	36	170	57	33	11	4.7	6.4
17	55	47	43	50	11	198	130	51	20	11	4.1	6.4
18	51	42	40	50	11	653	100	50	17	11	4.4	7.9
19	49	36	37	52	11	222	86	52	16	9.1	4.4	6.7
20	46	33	36	46	11	206	76	47	19	10	4.4	6.0
21	44	31	38	38	15	682	66	40	18	16	4.1	4.1
22	42	31	40	35	25	902	60	37	16	16	4.1	6.7
23	45	33	50	30	55	272	54	35	15	16	4.1	9.1
24	113	35	179	26	47	285	52	32	14	16	4.4	8.7
25	71	56	486	25	46	539	64	31	13	16	4.4	9.1
26	57	931	369	24	32	255	58	28	16	14	4.4	10
27	51	647	212	22	25	181	100	27	13	13	5.7	8.3
28	57	257	153	21	23	179	360	26	13	10	6.0	8.7
29	59	172	127	20	20	817	500	27	16	9.1	6.0	7.9
30	65	130	109	18	---	700	320	26	45	11	7.5	7.9
31	56	---	94	17	---	880	---	24	---	5.7	4.4	---
TOTAL	3198	4045	3056	1298	548	8096	6626	1914	587	423.9	170.3	212.6
MEAN	103	135	98.6	41.9	18.9	261	221	61.7	19.6	13.7	5.49	7.09
MAX	711	931	486	81	55	902	520	220	45	27	10	10
MIN	20	31	36	17	11	16	52	24	13	5.7	4.1	4.1
CFSM	1.33	1.74	1.27	.54	.24	3.37	2.85	.80	.25	.18	.07	.09
IN.	1.54	1.94	1.47	.62	.26	3.89	3.18	.92	.28	.20	.08	.10

CAL YR 1979 TOTAL 36701.2 MEAN 101 MAX 1930 MIN 7.9 CFSM 1.30 IN 17.62
WTR YR 1980 TOTAL 30174.8 MEAN 82.4 MAX 931 MIN 4.1 CFSM 1.06 IN 14.48

Note.--No gage-height record Mar.30 to May 8.

01531000 CHEMUNG RIVER AT CHEMUNG, NY

LOCATION.--Lat 42°00'08", long 76°38'06", Chemung County, Hydrologic Unit 02050105, on right bank 100 ft (30 m) upstream from bridge on State Highway 427, 0.7 mi (1.1 km) southwest of Chemung, and 12.2 mi (19.6 km) upstream from mouth.

DRAINAGE AREA.--2,506 mi^2 (6,491 km^2).

PERIOD OF RECORD.--September 1903 to current year (gage heights only for some winter periods).

REVISED RECORDS.--WSP 891: 1935-39. WSP 1432: 1904, 1907, 1915. WSP 2103: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 778.63 ft (237.326 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Jan. 10, 1930, nonrecording gage on highway bridge 60 ft (18 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. High flows slightly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi^2 (118 km^2) of drainage area is diverted from Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--74 years (1905-13, 1914-80), 2,544 ft^3/s (72.05 m^3/s), 13.79 in/yr (350 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft^3/s (5,350 m^3/s) June 23, 1972, gage height, 31.62 ft (9.638 m), from floodmark, from rating curve extended above 65,000 ft^3/s (1,840 m^3/s) on basis of slope-area and velocity-area studies at gage height 19.57 ft (5.965 m) and slope-area and contracted opening measurements at gage heights 23.97 (7.306 m) and 31.62 ft (9.638 m); minimum, 49 ft^3/s (1.39 m^3/s) Aug. 14, 1911, gage height, 1.47 ft (0.448 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 30,000 ft^3/s (850 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	0700	*40,200	1,140	*15.04	4.584	Mar. 22	0700	37,700	1,070	14.60	4.450

Minimum discharge, 136 ft^3/s (3.85 m^3/s) Sept. 30; minimum gage height, 3.15 ft (0.960 m) Aug. 31, Sept. 11, 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	782	891	4130	3310	540	700	22300	6610	661	700	226	154
2	670	1490	3470	2500	520	620	17400	5230	632	632	221	158
3	772	5200	2930	2100	500	520	12300	4440	661	549	276	196
4	2150	3900	2580	1800	480	470	9090	3920	651	480	342	196
5	2690	2770	2430	1500	460	480	8530	3250	680	431	472	247
6	19000	2270	2320	1400	450	490	6900	2830	613	431	416	231
7	11300	2060	2360	1200	430	660	5400	2450	567	439	335	201
8	5420	1950	2360	1100	420	3900	4680	2130	549	423	288	181
9	3920	1760	2150	1000	410	9640	5310	1880	558	431	263	163
10	3660	1700	1900	980	400	3980	11200	1810	604	408	252	163
11	3000	1800	1780	940	400	2730	9950	1650	585	385	282	154
12	2590	1650	1710	1100	390	2410	7580	1580	558	364	252	149
13	2360	1440	1660	1100	380	1610	5750	1710	531	322	252	145
14	2250	1370	2000	1000	370	1760	5250	2300	505	295	276	149
15	1920	1380	1970	1200	370	1410	11800	3000	480	282	349	163
16	1650	1340	1680	1300	360	1060	10500	2360	567	269	308	172
17	1470	1300	1500	1100	360	1570	7340	1970	613	247	295	216
18	1340	1220	1000	1000	370	12900	5680	1950	622	252	282	226
19	1220	1160	980	980	370	9950	4910	1700	522	231	263	191
20	1140	1090	960	920	390	7650	4170	1580	505	221	247	186
21	1050	1020	1000	860	410	9950	3780	1580	497	206	221	177
22	986	999	1100	760	440	28800	3490	1580	514	201	206	172
23	937	974	1410	780	1140	14700	2770	1340	480	r06	201	163
24	1100	986	2250	800	2320	11100	2410	1240	455	206	191	163
25	1200	1100	10200	700	1810	16600	2250	1080	408	196	181	154
26	1160	7990	22200	720	1340	12500	2520	949	378	186	177	186
27	1020	32600	12000	740	880	7830	2300	869	349	181	172	149
28	974	15900	6920	700	820	6150	3700	803	322	177	158	145
29	999	8430	5140	680	760	10800	14400	751	322	201	149	149
30	1010	5380	4360	640	---	19100	12000	710	522	263	145	136
31	962	---	3800	580	---	19600	---	700	---	247	145	---
TOTAL	80702	113120	112250	35490	18290	221640	225660	65952	15911	10062	7843	5235
MEAN	2603	3771	3621	1145	631	7150	7522	2127	530	325	253	175
MAX	19000	32600	22200	3310	2320	28800	22300	6610	680	700	472	247
MIN	670	891	960	580	360	470	2250	700	322	177	145	136
CFSM	1.04	1.51	1.45	.46	.25	2.85	3.00	.85	.21	.13	.10	.07
IN.	1.20	1.68	1.67	.53	.27	3.29	3.35	.98	.24	.15	.12	.08

CAL YR 1979 TOTAL 1156498 MEAN 3168 MAX 50900 MIN 223 CFSM 1.26 IN 17.17
WTR YR 1980 TOTAL 912155 MEAN 2492 MAX 32600 MIN 136 CFSM .99 IN 13.54

LAKES AND RESERVOIRS IN SUSQUEHANNA RIVER BASIN

01499500 EAST SIDNEY LAKE AT EAST SIDNEY, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

01511000 WHITNEY POINT LAKE AT WHITNEY POINT, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

01521000 ARKPORT RESERVOIR NEAR ARKPORT, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

01523000 ALMOND LAKE NEAR ALMOND, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

DIVERSION OF WATER AFFECTING THE SUSQUEHANNA RIVER BASIN

01528700 Diversion from Waneta Lake to Keuka Lake at Keuka, NY (see station for daily discharge).

03011020 ALLEGHENY RIVER AT SALAMANCA, NY

LOCATION.--Lat 42°09'23", long 78°42'56", Cattaraugus County, Hydrologic Unit 05010001, on left bank 230 ft (70 m) upstream Main Street bridge in Salamanca, 1.3 mi (2.1 km) downstream from Great Valley Creek, and 1.6 mi (2.6 km) upstream from Little Valley Creek.

DRAINAGE AREA.--1,608 mi^2 (4,165 km^2).

PERIOD OF RECORD.--September 1903 to current year. Monthly discharge only for some periods, published in WSP 1305. Prior to October 1964, published as "at Red House."

REVISED RECORDS.--WSP 1385: 1907, 1090-12, 1913(M), 1914-15, 1916-17(M), 1925, 1927. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,358.00 ft (413.918 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Sept. 3, 1917, nonrecording gage and Sept. 4, 1917 to Sept. 30, 1964, water-stage recorder at site 7.5 mi (12.1 km) downstream at different datum. Oct.1, 1964 to Sept. 30, 1967, at present site at datum 0.04 ft (0.012 m) lower.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--77 years, 2,787 ft^3/s (78.93 m^3/s), 23.54 in/yr (598 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73,000 ft^3/s (2,070 m^3/s) June 23, 1972, gage height, 24.01 ft (7.318 m) from floodmarks; minimum daily, 79 ft^3/s (2.24 m^3/s) Sept. 10, 11, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 16,200 ft^3/s (459 m^3/s) Mar. 22, gage height 9.69 ft (2.954 m), no peak above base of 17,000 ft^3/s (481 m^3/s); minimum 264 ft^3/s (7.48 m^3/s) Sept. 30, gage height 2.90 ft (0.884 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	926	1590	5520	3340	740	600	13900	2900	915	1920	582	387
2	723	1790	4140	2900	720	580	11700	2700	1010	1250	479	2170
3	652	1990	3390	2590	700	540	9850	2610	1580	985	2520	2760
4	658	1880	2920	2100	660	500	8420	2510	2280	845	2840	1460
5	1030	1700	2650	1800	640	490	7590	2260	1510	743	1440	981
6	5680	1610	2550	1500	620	826	6330	2090	1080	763	1460	738
7	5720	1620	2550	1400	600	1090	5340	1990	936	738	1620	613
8	5300	1690	2590	1400	580	3250	4630	1820	1630	644	1360	511
9	4660	1790	2420	1300	560	7080	5740	1680	2360	603	1490	450
10	4580	3120	2140	1200	540	6280	6910	1550	2380	573	1370	440
11	4330	3940	2180	1800	520	7790	7040	1450	2210	507	1110	411
12	3740	3220	2450	5650	500	5360	6600	1420	1830	458	1260	375
13	3380	2880	3070	3590	480	3810	6330	1770	1570	414	1250	348
14	3650	2830	2870	2900	470	3190	5850	2910	1380	384	1040	522
15	3600	2720	2570	2800	450	2710	7960	2710	1400	363	2010	712
16	3040	2650	2350	2500	440	2380	7720	2250	3760	352	3730	674
17	2640	2480	2230	2300	430	3420	6840	2010	2480	349	2930	522
18	2330	2320	2010	2100	420	7680	5720	1970	1750	369	1890	450
19	2080	2180	1900	2000	410	7680	4770	2160	1440	456	1500	421
20	1890	2010	1860	1700	410	7080	4010	2180	1480	355	1250	393
21	1780	1870	1810	1600	500	9960	3450	2040	2350	325	1000	362
22	1620	1780	1720	1400	620	15300	2980	2130	1820	365	843	342
23	1510	1760	1830	1300	1210	11200	2610	1870	1350	468	744	342
24	1700	1810	3920	1000	1700	9590	2350	1660	1090	487	665	335
25	1960	2390	13000	1000	1380	9960	2140	1520	953	391	598	316
26	2030	6590	14200	1000	1080	7890	1980	1380	857	328	538	329
27	1950	9980	10100	960	857	6090	1800	1240	795	305	481	316
28	1920	9950	7570	900	657	5590	1890	1120	743	304	437	298
29	1990	9700	5780	860	642	7610	3030	1020	1070	430	404	292
30	1880	7760	4710	820	---	10100	3330	969	1880	580	380	275
31	1700	---	3940	780	---	11500	---	931	---	655	450	---
TOTAL	80649	99600	122940	58490	19536	177126	168810	58820	47889	17709	39671	18545
MEAN	2602	3320	3966	1887	674	5714	5627	1897	1596	571	1280	618
MAX	5720	9980	14200	5650	1700	15300	13900	2910	3760	1920	3730	2760
MIN	652	1590	1720	780	410	490	1800	931	743	304	380	275
CFSM	1.62	2.07	2.47	1.17	.42	3.55	3.50	1.18	.99	.36	.80	.38
IN.	1.87	2.30	2.84	1.35	.45	4.10	3.91	1.36	1.11	.41	.92	.43

CAL YR 1979 TOTAL 1178202 MEAN 3228 MAX 20900 MIN 346 CFSM 2.01 IN 27.26
WTR YR 1980 TOTAL 909785 MEAN 2486 MAX 15300 MIN 275 CFSM 1.55 IN 21.05

03013000 CONEWANGO CREEK AT WATERBORO, N.Y.

LOCATION.--Lat 42°10'15", long 79°04'10", Chautauqua County, Hydrologic Unit 05010002, on right bank 300 ft (91 m) downstream from bridge on State Highway 394 at Waterboro, 0.2 mi (0.3 km) downstream from Davis Brook, 0.4 mi (0.6 km) upstream from Harris Brook, and 1.9 mi (3.1 km) northeast of Kennedy.

DRAINAGE AREA.--290 mi^2 (751 km^2).

PERIOD OF RECORD.--September 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,255.30 ft (382.615 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Nov. 7, 1939, nonrecording gages at site 1,300 ft (396 m) upstream at various datums. Nov. 7, 1939 to Nov. 4, 1940, nonrecording gage at site 1,100 ft (335 m) upstream at datum 0.79 ft (0.241 m) higher, and Nov. 5, 1940 to May 28, 1948, nonrecording gage at site 700 ft (213 m) downstream at present datum.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--42 years, 526 ft^3/s (14.90 m^3/s), 24.63 in/yr (626 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 8,600 ft^3/s (244 m^3/s) Apr. 7, 1947; maximum gage height, 11.58 ft (3.530 m) Mar. 8, 1956; minimum discharge observed, 22 ft^3/s (0.62 m^3/s) Aug. 18, 1940, Sept. 27, 29, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,300 ft^3/s (65.1 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Dec. 26	unknown	a2,500	70.8	unknown		Apr. 2	0200	*2,640	74.8	*8.79	2.679
Mar. 23	1000	2,600	73.6	8.73	2.661						

a. About.

Minimum discharge, 60 ft^3/s (1.70 m^3/s) July 27, gage height, 2.87 ft (0.875 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	466	752	860	250	250	2590	720	146	181	67	81
2	172	420	670	740	240	220	2620	580	140	146	68	804
3	157	387	585	660	230	210	2490	451	163	134	738	1490
4	148	341	519	580	220	200	2240	352	222	126	1120	1260
5	276	311	600	520	210	210	2030	288	203	121	874	766
6	920	279	1300	400	210	240	1780	258	161	130	515	391
7	1210	304	1300	390	200	280	1450	238	140	119	295	238
8	1400	391	1200	370	200	567	1160	219	163	117	384	174
9	1370	391	860	350	190	889	1240	203	216	114	380	146
10	1280	795	700	330	190	989	1250	193	198	107	249	163
11	1200	946	800	1100	190	1230	1160	189	184	98	214	142
12	1060	909	900	1700	180	1190	1050	186	148	95	314	121
13	994	771	860	900	180	1030	1020	191	119	92	270	114
14	1100	665	660	860	180	859	1000	241	97	87	198	142
15	1110	622	560	840	170	685	1190	241	98	84	198	170
16	962	631	520	800	170	563	1250	211	288	81	172	138
17	814	622	500	840	170	844	1200	191	282	77	136	130
18	680	646	500	880	170	1490	1090	211	184	72	119	128
19	549	617	520	700	170	1720	983	366	132	72	115	121
20	532	549	520	640	170	1870	844	321	439	72	119	108
21	603	470	470	540	170	2120	725	298	983	68	138	98
22	545	405	460	500	250	2470	599	443	795	70	110	97
23	458	474	700	430	576	2580	474	345	466	82	98	117
24	387	549	960	380	650	2510	380	246	270	77	92	130
25	431	680	1300	350	594	2510	318	198	196	70	85	114
26	515	780	2000	330	494	2410	288	172	163	66	81	126
27	519	899	1800	320	395	2200	270	154	152	63	77	136
28	571	869	1500	300	359	2040	370	154	179	79	75	117
29	660	889	1300	280	308	2060	660	152	264	87	74	102
30	650	834	1100	270	---	2190	790	150	232	81	71	92
31	563	---	920	260	---	2350	---	150	---	71	70	---
TOTAL	22025	17912	27336	18420	7686	40976	34511	8312	7423	2939	7516	7956
MEAN	710	597	882	594	265	1322	1150	268	247	94.8	242	265
MAX	1400	946	2000	1700	650	2580	2620	720	983	181	1120	1490
MIN	148	279	460	260	170	200	270	150	97	63	67	81
CFSM	2.45	2.06	3.04	2.05	.91	4.56	3.97	.92	.85	.33	.83	.91
IN.	2.83	2.30	3.51	2.36	.99	5.26	4.43	1.07	.95	.38	.96	1.02

CAL YR 1979 TOTAL 299511 MEAN 821 MAX 4460 MIN 49 CFSM 2.83 IN 38.42
WTR YR 1980 TOTAL 203012 MEAN 555 MAX 2620 MIN 63 CFSM 1.91 IN 26.04

03013946 CHAUTAUQUA LAKE AT BEMUS POINT, NY

LOCATION.--Lat 42°09'23", long 79°23'39", Chautauqua County, Hydrologic Unit 05010002, 6 ft (1.8 m) east of lake shore, 30 ft (9.1 m) south of the intersection of Pauline Avenue and Lakeside Avenue, and 950 ft (290 m) southeast of the ferry landing, at Bemus Point.

DRAINAGE AREA.--189 mi² (490 km²).

PERIOD OF RECORD.--October 1972 to September 1973; November 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Nov. 1974 at site 950 ft (290 m) northwest at same datum.

REMARKS.--Lake regulated for flood control by Warner Dam. Area of water surface, 20.98 mi² (54.34 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,311.23 ft (399.663 m) Mar. 5, 1976; minimum, 1,306.35 ft (398.175 m) Mar. 11, 12, 13, 14, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,308.78 ft (398.916 m) Apr. 1; minimum, 1,306.56 ft (398.239 m) Mar. 6, 7.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1308.24	1308.01	1307.57	1307.88	1307.30	1306.68	1308.76	1308.35	1308.18	1308.19	1308.10	1308.09
2	1308.25	1307.97	1307.55	1307.83	1307.24	1306.65	1308.74	1308.30	1308.18	1308.18	1308.11	1308.28
3	1308.24	1307.91	1307.50	1307.77	1307.20	1306.62	1308.69	1308.23	1308.26	1308.17	1308.38	1308.34
4	1308.23	1307.86	1307.45	1307.71	1307.16	1306.60	1308.66	1308.22	1308.32	1308.16	1308.51	1308.27
5	1308.26	1307.80	1307.41	1307.66	1307.11	1306.59	1308.64	1308.22	1308.32	1308.16	1308.45	1308.24
6	1308.36	1307.74	1307.45	1307.60	1307.07	1306.58	1308.58	1308.22	1308.31	1308.17	1308.40	1308.23
7	1308.40	1307.71	1307.50	1307.55	1307.01	1306.56	1308.51	1308.21	1308.32	1308.15	1308.33	1308.21
8	1308.44	1307.69	1307.54	1307.50	1306.97	1306.65	1308.45	1308.20	1308.41	1308.16	1308.38	1308.19
9	1308.39	1307.67	1307.54	1307.44	1306.95	1306.75	1308.60	1308.19	1308.36	1308.17	1308.52	1308.18
10	1308.33	1307.78	1307.52	1307.38	1306.91	1306.82	1308.66	1308.18	1308.30	1308.16	1308.46	1308.16
11	1308.29	1307.82	1307.50	1307.50	1306.88	1306.98	1308.64	1308.19	1308.26	1308.14	1308.39	1308.13
12	1308.26	1307.79	1307.53	1307.99	1306.84	1307.04	1308.60	1308.21	1308.25	1308.13	1308.33	1308.12
13	1308.29	1307.75	1307.53	1308.02	1306.80	1307.04	1308.59	1308.24	1308.25	1308.11	1308.30	1308.11
14	1308.36	1307.71	1307.50	1308.00	1306.77	1307.04	1308.59	1308.29	1308.24	1308.10	1308.29	1308.15
15	1308.32	1307.69	1307.47	1307.98	1306.76	1307.01	1308.72	1308.31	1308.30	1308.08	1308.30	1308.16
16	1308.26	1307.71	1307.42	1307.94	1306.76	1306.98	1308.72	1308.32	1308.52	1308.08	1308.28	1308.15
17	1308.23	1307.68	1307.39	1307.91	1306.72	1307.07	1308.66	1308.32	1308.47	1308.07	1308.24	1308.14
18	1308.22	1307.67	1307.35	1307.91	1306.68	1307.41	1308.59	1308.35	1308.39	1308.06	1308.22	1308.13
19	1308.23	1307.65	1307.32	1307.88	1306.65	1307.49	1308.52	1308.41	1308.31	1308.05	1308.22	1308.12
20	1308.28	1307.62	1307.27	1307.83	1306.62	1307.58	1308.44	1308.36	1308.31	1308.03	1308.21	1308.10
21	1308.33	1307.58	1307.23	1307.77	1306.60	1307.87	1308.36	1308.32	1308.31	1308.02	1308.21	1308.10
22	1308.33	1307.55	1307.19	1307.69	1306.60	1308.15	1308.27	1308.28	1308.24	1308.04	1308.20	1308.10
23	1308.34	1307.55	1307.21	1307.63	1306.65	1308.15	1308.23	1308.24	1308.23	1308.05	1308.19	1308.14
24	1308.30	1307.57	1307.37	1307.62	1306.70	1308.15	1308.20	1308.22	1308.23	1308.03	1308.18	1308.12
25	1308.32	1307.58	1307.81	1307.58	1306.71	1308.28	1308.19	1308.22	1308.23	1308.01	1308.17	1308.11
26	1308.29	1307.61	1308.10	1307.54	1306.71	1308.28	1308.20	1308.21	1308.22	1307.99	1308.16	1308.12
27	1308.22	1307.61	1308.10	1307.50	1306.72	1308.24	1308.21	1308.19	1308.21	1308.00	1308.14	1308.10
28	1308.19	1307.60	1308.05	1307.45	1306.71	1308.23	1308.26	1308.19	1308.21	1308.10	1308.13	1308.08
29	1308.18	1307.62	1308.01	1307.41	1306.70	1308.31	1308.35	1308.19	1308.22	1308.11	1308.12	1308.07
30	1308.12	1307.61	1307.97	1307.38	---	1308.39	1308.39	1308.18	1308.21	1308.11	1308.11	1308.06
31	1308.05	---	1307.93	1307.33	---	1308.51	---	1308.19	---	1308.10	1308.09	---
MEAN	1308.28	1307.70	1307.56	1307.68	1306.84	1307.38	1308.50	1308.25	1308.29	1308.10	1308.26	1308.15
MAX	1308.44	1308.01	1308.10	1308.02	1307.30	1308.51	1308.76	1308.41	1308.52	1308.19	1308.52	1308.34
MIN	1308.05	1307.55	1307.19	1307.33	1306.60	1306.56	1308.19	1308.18	1308.18	1307.99	1308.09	1308.06

CAL YR 1979 MEAN 1308.00 MAX 1310.10 MIN 1306.73
WTR YR 1980 MEAN 1307.92 MAX 1308.76 MIN 1306.56

03014500 CHADAKOIN RIVER AT FALCONER, NY

LOCATION.--Lat 42°06'45", long 79°12'15", Chautauqua County, Hydrologic Unit 05010002, on left bank 10 ft (3 m) downstream from South Dow Street Bridge in Falconer, 2.1 mi (3.4 km) upstream from mouth, and 6 mi (10 km) downstream from Chautauqua Lake.

DRAINAGE AREA.--194 mi^2 (502 km^2).

PERIOD OF RECORD.--October 1934 to current year.

REVISED RECORDS.--WSP 803: 1936(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,256.41 ft (382.954 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Chautauqua Lake. Diurnal fluctuation caused by mills upstream from station. Monthly figures for 1951-66 water years adjusted for regulation.

AVERAGE DISCHARGE.--45 years (1935-80), 348 ft^3/s (9.855 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,250 ft^3/s (63.7 m^3/s) Sept. 14, 1979, gage height, 4.93 ft (1.503 m); minimum, 2.7 ft^3/s (0.076 m^3/s) Nov. 20, 21, 1960, gage height, 0.15 ft (0.046 m); minimum daily, 3.0 ft^3/s (0.085 m^3/s) Nov. 20, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,060 ft^3/s (30.0 m^3/s) Apr. 16, gage height, 2.96 ft (0.902 m), minimum 21 ft^3/s (0.59 m^3/s) Nov. 7, gage height, 0.41 ft (0.125 m) result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	560	574	604	459	275	985	663	62	63	55	72
2	82	583	586	600	454	275	988	659	62	62	58	216
3	81	576	564	593	449	272	958	412	106	62	157	641
4	82	572	562	583	446	271	975	171	60	62	561	622
5	100	563	525	575	439	275	997	129	57	76	651	104
6	515	556	518	566	434	272	917	107	55	60	654	65
7	695	376	519	558	432	272	876	107	63	60	638	65
8	773	529	543	550	407	307	820	107	250	68	475	66
9	832	531	524	539	369	289	926	100	677	59	641	69
10	785	550	526	520	366	356	942	65	602	58	768	66
11	675	541	524	564	364	392	932	63	87	58	768	65
12	557	538	528	568	364	416	921	65	64	57	625	64
13	567	535	528	558	359	429	941	73	64	56	314	67
14	661	540	535	600	356	446	913	65	61	55	184	82
15	770	538	518	633	354	439	994	64	93	55	179	66
16	565	539	510	627	355	435	1040	62	378	54	175	67
17	252	532	512	624	350	454	969	90	679	52	163	69
18	242	528	496	627	341	529	945	173	673	52	74	66
19	87	528	486	625	337	539	913	480	669	57	67	66
20	88	529	482	619	326	551	891	652	715	65	66	65
21	99	522	471	613	273	608	863	653	677	65	66	64
22	185	523	467	600	279	712	629	451	486	72	66	68
23	209	519	474	598	280	783	337	329	68	67	65	73
24	360	533	514	472	280	789	274	187	66	63	65	92
25	568	523	644	478	279	835	130	63	64	62	68	66
26	788	533	767	475	279	826	104	63	64	62	67	71
27	721	532	748	474	281	807	109	63	64	65	67	63
28	576	537	687	469	279	801	220	63	78	69	74	63
29	656	552	622	469	278	834	536	62	67	67	68	64
30	688	602	615	465	---	847	656	62	65	62	65	62
31	388	---	609	462	---	912	---	64	---	58	66	---
TOTAL	13730	16120	17178	17308	10269	16248	22701	6367	7176	1903	8010	3349
MEAN	443	537	554	558	354	524	757	205	239	61.4	258	112
MAX	832	602	767	633	459	912	1040	663	715	76	768	641
MIN	81	376	467	462	273	271	104	62	55	52	55	62

CAL YR 1979 TOTAL 161436 MEAN 442 MAX 1550 MIN 20
WTR YR 1980 TOTAL 140359 MEAN 383 MAX 1040 MIN 52

LAKES IN ALLEGHENY RIVER BASIN

03013946 Chautauqua Lake at Bemus Point, NY (see station for daily mean elevation).

04213492 SOUTH BRANCH CATTARAUGUS CREEK NEAR CATTARAUGUS, NY

LOCATION.--Lat 42°20'27", long 78°51'00", Cattaraugus County, Hydrologic Unit 04120102, on right bank 70 ft (21 m) downstream from bridge on Skinner Hollow Road, 0.5 mi (0.8 km) upstream from Gowan Hollow Creek, 0.5 mi (0.8 km) northeast of Cattaraugus village limits, and 10.6 mi (17.1 km) upstream from mouth.

DRAINAGE AREA.--67.5 mi^2 (175 km^2).

PERIOD OF RECORD.--October 1979 to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 1,190 ft (363 m) from topographic map.

REMARKS.--Records poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of 6.84 ft (2.085 m), discharge, 4,000 ft^3/s (113 m^3/s) from floodmarks on basis of contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,700 ft^3/s (48.1 m^3/s) and maximum (*), from rating curve extended above 1,000 ft^3/s (28.3 m^3/s) on basis of contracted-opening measurement of peak flow:

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Dec. 25	0730	2,720	77.0	4.97	1.515	Mar. 8	0545	ice jam		a4.52	1.378
Jan. 11	2100	2,590	73.3	4.79	1.460	Mar. 21	1800	*2,880	81.6	*5.08	1.548

a About.

Minimum daily discharge, 14 ft^3/s (0.40 m^3/s) Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	85	133	150	29	38	455	100	36	140	18	19
2	45	93	116	120	29	33	280	84	34	60	20	143
3	45	82	101	100	29	30	185	70	34	46	128	93
4	45	73	93	82	29	37	264	62	34	94	60	38
5	68	64	94	80	29	60	235	62	30	180	32	27
6	400	60	159	88	31	80	151	60	26	200	35	24
7	180	101	172	98	31	120	136	56	58	100	30	21
8	180	96	204	110	30	300	113	52	130	35	37	20
9	310	85	148	120	30	315	235	48	98	19	30	19
10	270	771	120	140	28	371	190	45	62	18	27	20
11	230	254	155	985	31	581	170	52	45	17	150	18
12	167	163	155	673	29	176	150	62	34	16	64	17
13	225	130	172	315	28	96	120	78	31	16	36	19
14	149	136	123	270	28	82	110	92	23	15	32	26
15	199	130	104	230	27	66	100	76	30	15	29	21
16	133	176	90	190	26	101	94	60	96	15	25	19
17	104	123	76	170	25	663	86	52	74	15	22	19
18	89	116	82	140	24	711	78	66	44	15	22	19
19	75	98	90	120	26	355	74	82	28	16	20	18
20	158	85	78	98	32	446	68	68	90	25	19	17
21	122	75	68	80	40	1290	64	58	150	38	18	17
22	82	71	66	64	54	741	76	48	250	52	18	18
23	74	75	230	42	78	371	74	41	94	50	18	24
24	80	126	600	41	74	473	70	36	40	16	17	20
25	201	116	1920	37	58	582	66	32	27	16	16	23
26	161	378	1070	34	52	230	62	30	50	16	16	30
27	125	209	473	32	45	280	58	28	110	19	16	26
28	167	225	291	31	43	315	90	27	210	19	15	25
29	190	214	244	30	40	761	230	26	170	20	15	25
30	120	163	214	29	---	473	160	26	220	19	15	24
31	98	---	176	29	---	823	---	45	---	18	14	---
TOTAL	4537	4573	7817	4728	1055	11000	4244	1724	2358	1340	1014	849
MEAN	146	152	252	153	36.4	355	141	55.6	78.6	43.2	32.7	28.3
MAX	400	771	1920	985	78	1290	455	100	250	200	150	143
MIN	45	60	66	29	24	30	58	26	23	15	14	17
CFSM	2.16	2.25	3.73	2.27	.54	5.26	2.09	.82	1.16	.64	.48	.42
IN.	2.50	2.52	4.31	2.61	.58	6.06	2.34	.95	1.30	.74	.56	.47

WTR YR 1980 TOTAL 45239 MEAN 124 MAX 1920 MIN 14 CFSM 1.84 IN 24.93

Note.--Indefinite stage-discharge relation Apr. 10 to July 23.

04213500 CATTARAUGUS CREEK AT GOWANDA, NY
(National stream-quality accounting network station)

LOCATION.--Lat 42°27'50", long 78°56'10", Erie County, Hydrologic Unit 04120102, on right bank 380 ft (116 m) downstream from bridge on State Highways 39 and 62 at Gowanda, and 4.2 mi (6.8 km) downstream from South Branch. Water-quality sampling site at discharge station.

DRAINAGE AREA.--432 mi^2 (1,119 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1939 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1971: 1956(M). WRD NY 1974: 1940-42 (M, P).

GAGE.--Water-stage recorder. Datum of gage is 738.85 ft (225.201 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1969, at datum 0.11 ft (0.034 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Diurnal fluctuation at low and medium flow caused by powerplant 20 mi (32 km) upstream from station.

AVERAGE DISCHARGE.--40 years (1940-80), 736 ft^3/s (20.84 m^3/s), 23.14 in/yr (588 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,600 ft^3/s (980 m^3/s) Mar. 7, 1956, gage height, 14.14 ft (4.310 m); minimum, about 6 ft^3/s (0.17 m^3/s) Aug. 21, 1941, result of regulation; minimum gage height, 0.90 ft (0.274 m) Oct. 26, 1951; minimum daily discharge, 52 ft^3/s (1.47 m^3/s) Sept. 13, 1945, Aug. 1, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,000 ft^3/s (227 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 25	1000	8,780	249	7.47	2.277	Mar. 21	2100	*9,820	278	*7.87	2.399

Minimum discharge, 94 ft^3/s (2.66 m^3/s) Aug. 26, gage height, 1.38 ft (0.421 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	264	540	846	783	290	240	3080	636	268	276	153	170
2	256	553	798	712	280	220	1960	553	248	230	237	814
3	252	540	720	658	260	200	1450	490	288	215	1380	752
4	248	509	696	540	250	190	1580	450	276	202	736	318
5	490	473	736	520	240	260	1670	417	237	297	337	248
6	2940	444	1680	420	220	350	1170	390	226	673	375	205
7	1400	629	1650	500	220	600	955	385	219	297	297	176
8	1350	689	1520	467	200	880	846	360	264	241	370	176
9	1570	560	991	433	190	860	1130	351	272	222	293	170
10	1200	2270	814	433	180	800	1020	337	276	205	233	226
11	895	1170	955	2090	180	680	982	332	252	195	720	192
12	744	822	1090	3080	160	600	854	327	237	179	775	167
13	1050	689	1010	1080	160	540	904	355	222	173	427	162
14	1380	720	775	1030	160	490	982	406	212	165	318	297
15	1000	681	644	1050	150	460	1770	380	268	165	328	346
16	775	791	601	964	150	440	1160	341	433	165	276	233
17	615	689	547	912	160	1000	982	310	280	165	233	215
18	553	775	540	973	170	3710	929	351	237	153	216	222
19	509	636	520	806	180	1870	775	490	215	150	205	199
20	775	560	500	658	210	2460	689	385	912	159	192	183
21	728	521	500	560	430	5280	629	411	1320	173	180	183
22	534	490	509	521	700	4020	560	375	467	205	173	176
23	485	566	1090	515	820	2160	515	318	323	226	176	248
24	651	704	2800	430	680	2060	485	292	272	179	170	215
25	1050	752	7190	410	580	3090	467	280	252	165	162	183
26	862	1180	4090	390	480	1770	444	256	230	159	132	244
27	666	1050	1900	380	360	1650	433	244	215	159	150	222
28	912	854	1250	360	290	2430	560	244	226	189	150	192
29	982	1000	1050	340	270	3800	1090	241	276	199	148	179
30	736	904	991	330	---	3330	879	260	310	186	153	170
31	601	---	862	310	---	3890	---	276	---	159	148	---
TOTAL	26473	22761	39865	22655	8620	50330	30950	11243	9733	6526	9843	7483
MEAN	854	759	1286	731	297	1624	1032	363	324	211	318	249
MAX	2940	2270	7190	3080	820	5280	3080	636	1320	673	1380	814
MIN	248	444	500	310	150	190	433	241	212	150	132	162
CFSM	1.98	1.76	2.98	1.69	.69	3.76	2.39	.84	.75	.49	.74	.58
IN.	2.28	1.96	3.43	1.95	.74	4.33	2.67	.97	.84	.56	.85	.64

CAL YR 1979 TOTAL 353467 MEAN 968 MAX 12300 MIN 116 CFSM 2.24 IN 30.44
WTR YR 1980 TOTAL 246482 MEAN 673 MAX 7190 MIN 132 CFSM 1.56 IN 21.22

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959, 1963-64, 1972 to current year.
CHEMICAL DATA: 1959 (e), 1963 (b), 1972 (a), 1975 (b), 1976-78 (c), 1979-80 (d).
MINOR ELEMENTS DATA: 1972-74 (a), 1975 (b), 1976-77 (c), 1978-79 (d).
ORGANIC DATA: OC--1975 (b), 1976-77 (c), 1978-80 (d).
NUTRIENT DATA: 1975 (b), 1976-77 (c), 1978-80 (d).
BIOLOGICAL DATA:
Bacterial--1978-80 (d).
Phytoplankton--1978 (b), 1979-80 (c).
SEDIMENT DATA: 1964 (b), 1978-80 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1958 to September 1959, unpublished; January 1978 to current year.
pH: October 1958 to September 1959, unpubished.
WATER TEMPERATURES: October 1958 to September 1959, January 1978 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 952 micromhos Oct. 7, 1958; minimum daily, 166 micromhos Feb. 1, 1959.
WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 19, 1978; minimum daily, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily 460 micromhos July 25; minimum daily, 215 micromhos Feb. 10, Mar. 27.
WATER TEMPERATURES: Maximum daily 27.5°C Aug. 7, 8, 17; minimum daily, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 to SEPTEMBER 1980

DATE		STREAM-FLOW, INSTANTANEOUS (FT^3/S)	SPECIFIC CONDUCTANCE MICROMHOS)	PH (UNITS)	TEMPERATURE, WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT 30...	1200	730	320	7.8	9.0	20	10.8	93	290	90	130
NOV 26...	1100	1310	325	7.4	11.0	100	8.7	81	640	4100	140
DEC 17...	1130	482	350	7.7	.0	20	13.8	95	88	140	150
JAN 22...	1130	483	332	7.8	.0	2.0	11.8	84	K90	93	150
FEB 20...	1200	300	415	8.2	.0	1.0	—	--	K36	170	170
MAR 26...	1200	1550	230	7.3	2.0	2.0	12.7	93	330	440	93
APR 29...	1130	1120	280	7.8	9.0	120	8.8	78	560	7600	130
MAY 20...	1200	408	347	7.8	17.0	2.0	8.7	91	110	K12	150
JUN 18...	1200	223	415	7.2	18.5	1.5	8.9	96	210	94	160
JUL 16...	1000	167	440	8.0	26.0	4.1	7.4	95	330	40	170
AUG 06...	1000	388	380	7.9	24.0	140	7.8	93	K2700	3600	170
SEP 04...	1000	321	371	7.9	19.5	2.1	8.2	89	3800	770	170

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT 30...	13	41	7.4	8.0	1.8	120	24	10	.1	4.8	--
NOV 26...	30	44	7.3	5.9	1.5	110	28	8.3	.1	4.6	173
DEC 17...	38	47	7.5	7.8	1.3	110	30	13	.1	4.2	194
JAN 22...	30	47	7.9	8.1	1.2	120	29	12	.1	4.9	190
FEB 20...	41	54	8.7	11	1.2	130	37	18	.1	4.5	215
MAR 26...	22	29	4.9	5.2	1.1	71	20	9.1	.1	3.7	128
APR 29...	28	39	6.8	7.0	1.4	97	23	11	.1	3.9	169
MAY 20...	29	46	8.3	12	1.3	120	30	14	.1	3.3	209
JUN 18...	34	51	9.0	14	1.7	130	35	19	.1	2.3	253
JUL 16...	30	52	9.7	18	2.0	140	38	24	.1	1.9	282
AUG 06...	42	54	9.1	10	1.9	130	40	14	.1	5.2	253
SEP 04...	47	52	8.9	9.9	2.2	120	32	15	.1	5.8	215

K Results based on colony count outside the acceptable range (non-ideal colony count).

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)
OCT 30...	171	.51	.49	.11	.09	.45	.45	.56	.54	1.1	1.0
NOV 26...	168	.61	.56	.08	.02	.38	.37	.46	.39	1.1	.95
DEC 17...	182	1.0	1.2	.06	.05	.33	.14	.39	.19	1.4	1.4
JAN 22...	188	1.3	1.3	.15	.15	.42	.05	.57	.20	1.9	1.5
FEB 20...	219	1.4	1.4	.21	.23	.26	.22	.47	.45	1.9	1.9
MAR 26...	120	.92	.92	.08	.07	.30	.12	.38	.19	1.3	1.1
APR 29...	155	.85	.83	.05	.05	.41	.29	.46	.34	1.3	1.2
MAY 20...	190	.80	.66	.17	.24	.38	.21	.55	.45	1.4	1.1
JUN 18...	214	.82	.83	.36	.33	.15	.20	.51	.53	1.3	1.4
JUL 16...	233	.61	.61	.52	.46	.30	.37	.82	.83	1.4	1.4
AUG 06...	215	.78	.61	.09	.15	.56	.18	.65	.33	1.4	.94
SEP 04...	200	.49	.52	.18	.16	.33	.18	.51	.34	1.0	.86

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
OCT 30...	.03	.00	--	--	--	--	--	--	--	--	--
NOV 26...	.14	.01	2	1	--	50	2	2	20	<10	5
DEC 17...	.04	.01	--	--	--	--	--	--	--	--	--
JAN 22...	.02	.01	1	0	200	70	4	0	20	10	1
FEB 20...	.02	.01	--	--	--	--	--	--	--	--	--
MAR 26...	.07	.01	--	--	--	--	--	--	--	--	--
APR 29...	.18	.01	3	1	<50	50	0	4	20	10	0
MAY 20...	.03	.00	--	--	--	--	--	--	--	--	--
JUN 18...	.03	.01	1	1	100	70	0	0	20	10	0
JUL 16...	.02	.00	--	--	--	--	--	--	--	--	--
AUG 06...	.19	.01	--	--	--	--	--	--	--	--	--
SEP 04...	.07	.01	1	1	100	100	0	1	10	<10	5

04213500 - CATTARAUGUS CREEK AT GOWANDA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT											
30...	--	--	--	--	--	--	--	--	--	--	--
NOV											
26...	2	10	2	7500	30	26	13	170	20	<.1	<.1
DEC											
17...	--	--	--	--	--	--	--	--	--	--	--
JAN											
22...	0	2	2	950	0	36	1	30	6	<.1	<.1
FEB											
20...	--	--	--	--	--	--	--	--	--	--	--
MAR											
26...	--	--	--	--	--	--	--	--	--	--	--
APR											
29...	0	8	4	6100	450	12	12	130	20	.1	.1
MAY											
20...	--	--	--	--	--	--	--	--	--	--	--
JUN											
18...	0	5	1	1200	10	8	3	40	10	<.1	<.1
JUL											
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
SEP											
04...	0	14	1	3000	20	9	0	880	0	<.1	<.1

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT											
30...	--	--	--	--	--	--	--	--	2.9	--	--
NOV											
26...	11	0	0	0	0	0	30	20	--	8.3	--
DEC											
17...	--	--	--	--	--	--	--	--	1.9	--	--
JAN											
22...	5	0	0	0	0	0	10	10	--	16	1.0
FEB											
20...	--	--	--	--	1	--	--	--	8.1	--	--
MAR											
26...	--	--	--	--	0	--	--	--	3.6	--	--
APR											
29...	6	0	0	0	0	0	30	40	--	--	1.8
MAY											
20...	--	--	--	--	0	--	--	--	1.0	--	--
JUN											
18...	4	0	0	0	2	0	10	0	--	13	1.3
JUL											
16...	--	--	--	--	0	--	--	--	2.2	--	--
AUG											
06...	--	--	--	--	--	--	--	--	3.8	--	--
SEP											
04...	5	0	0	0	0	0	40	0	--	8.9	--

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)
NOV					
26...	1105	10	2.0	325	11.0
26...	1110	30	2.0	340	10.5
26...	1115	50	2.0	330	10.5
26...	1120	70	2.0	325	11.0
26...	1125	90	2.0	330	10.5
26...	1130	110	2.0	335	10.5
MAR					
26...	1210	10	2.0	230	2.0
26...	1215	30	2.0	235	2.0
26...	1220	50	2.0	235	2.0
26...	1225	70	2.0	240	2.0

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)
MAR					
26...	1230	90	2.0	230	2.0
26...	1235	110	2.0	230	2.0
AUG					
06...	1005	10	1.0	380	24.0
06...	1010	30	1.0	385	24.5
06...	1015	50	1.0	390	24.5
06...	1020	70	1.0	380	24.0
06...	1025	90	1.0	380	24.5
06...	1030	110	1.0	380	24.0

04213500 - CATTARAUGUS CREEK AT GOWANDA, NY--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (FT^3/S)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (FT^3/S)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 30...	1200	730	43	85	APR 29...	1130	1120	220	665
NOV 26...	1100	1310	271	959	MAY 20...	1200	408	19	21
DEC 17...	1130	482	33	43	JUN 18...	1200	223	27	16
JAN 22...	1130	483	21	27	JUL 16...	1000	167	10	4.5
FEB 20...	1200	300	141	114	AUG 06...	1000	388	279	292
MAR 26...	1200	1550	124	519	SEP 04...	1000	321	62	54

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1979 TO SEPTEMBER 1980

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2) Dry weight	Biomass (g/m^2) Ash weight	Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
May 20 to June 18	29	5.12	4.41	.950	5.70	Polyethylene strip
June 18 to July 16	28	2.05	2.21	.000	.000	Polyethylene strip
July 16 to Aug. 6	21	12.0	11.1	1.52	.290	Polyethylene strip
Aug. 6 to Sept. 4	29	--	--	.460	.260	Polyethylene strip

PHYTOPLANKTON

DATE	NOV 26,79	MAR 26,80	MAY 20,80	JUN 18,80
TIME	1100	1200	1200	1200
TOTAL CELLS/ML	5300	10	790	400
DIVERSITY: DIVISION	0.0	0.0	0.3	0.4
.CLASS	0.0	0.0	0.3	0.4
..ORDER	0.0	0.0	0.7	0.7
...FAMILY	1.6	1.0	2.4	2.4
....GENUS	1.7	1.0	2.4	2.4

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	26	3	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	--	-	13	3
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	--	-	52	7	--	-
....MELOSIRA	--	-	--	-	--	-	26	6

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	NOV 26,79		MAR 26,80		MAY 20,80		JUN 18,80	
TIME	1100		1200		1200		1200	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	--	-
....COCCONEIS	51	1	--	-	--	-	13	3
...CYMBELLACEAE								
....CYMBELLA	150	3	--	-	78	10	13	3
...DIATOMACEAE								
....DIATOMA	51	1	5#	50	26	3	13	3
....OPEPHORA	150	3	--	-	--	-	--	-
...FRAGILARIACEAE								
....SYNEDRA	200	4	--	-	65	8	13	3
...GOMPHONEMATACEAE								
....GOMPHONEMA	100	2	--	-	13	2	--	-
...NAVICULACEAE								
....FRUSTULIA	--	-	--	-	--	-	--	-
....NAVICULA	3200#	60	--	-	180#	23	91#	23
...NITZSCHIACEAE								
....NITZSCHIA	1400#	27	--	-	340#	43	190#	48
...SURIRELLACEAE								
....CYMATOPLEURA	--	-	--	-	--	-	13	3
....SURIRELLA	--	-	5#	50	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	--	-	13	3
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENOPSIS	--	-	--	-	--	-	--	-
....CYLINDROSPERMUM	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	--	-	13	2	--	-

DATE	JUL 16,80		AUG 6,80		SEP 4,80	
TIME	1000		1000		1000	
TOTAL CELLS/ML	1200		730		860	
DIVERSITY: DIVISION	1.4		1.1		1.5	
.CLASS	1.4		1.1		1.5	
..ORDER	1.7		1.1		1.6	
...FAMILY	2.5		2.5		2.5	
....GENUS	2.6		2.7		2.6	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...COELASTRACEAE						
....COELASTRUM	--	-	--	-	180#	21
...OOCYSTACEAE						
....ANKISTRODESMUS	--	-	14	2	13	1
....KIRCHNERIELLA	39	3	--	-	--	-
....OOCYSTIS	52	4	--	-	13	1
...SCENEDESMACEAE						
....SCENEDESMUS	100	9	--	-	150#	18
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	26	2	--	-	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	52	4	--	-	13	1
....MELOSIRA	26	2	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	JUL 16,80 1000		AUG 6,80 1000		SEP 4,80 1000	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	13	1
....COCCONEIS	--	-	--	-	--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	55	8	13	1
...DIATOMACEAE						
....DIATOMA	--	-	28	4	--	-
....OPEPHORA	--	-	--	-	--	-
...FRAGILARIACEAE						
....SYNEDRA	--	-	--	-	13	1
...GOMPHONEMATACEAE						
....GOMPHONEMA	39	3	--	-	--	-
...NAVICULACEAE						
....FRUSTULIA	--	-	28	4	--	-
....NAVICULA	39	3	69	9	39	4
...NITZSCHIACEAE						
....NITZSCHIA	39	3	97	13	100	12
...SURIRELLACEAE						
....CYMATOPLEURA	--	-	--	-	--	-
....SURIRELLA	--	-	41	6	--	-
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOMONADACEAE						
....CRYPTOMONAS	26	2	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	--	-	--	-	--	-
..HORMOGONALES						
...NOSTOCACEAE						
....ANABAENOPSIS	160	13	--	-	--	-
....CYLINDROSPERMUM	--	-	280#	38	--	-
...OSCILLATORIACEAE						
....OSCILLATORIA	590#	50	120#	17	310#	36
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....EUGLENA	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980 (ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	450	357	298	320	270	405	250	360	400	382	440	440
2	454	348	291	330	410	405	250	360	400	362	418	440
3	438	361	280	365	410	400	260	355	390	365	340	440
4	391	342	280	360	400	405	255	355	390	368	342	440
5	439	348	275	320	395	410	295	360	370	370	390	420
6	288	343	265	318	395	400	295	370	400	368	390	415
7	318	352	268	350	400	400	260	370	405	380	438	440
8	318	363	272	398	385	390	300	370	400	368	370	440
9	319	354	290	400	395	410	300	370	410	385	305	420
10	330	282	320	398	215	305	300	370	410	383	320	440
11	314	320	285	226	220	300	285	380	410	381	310	380
12	284	320	290	228	400	300	290	375	415	380	335	380
13	286	360	288	285	395	320	280	380	415	402	305	380
14	282	341	350	285	400	315	290	375	410	404	405	380
15	312	331	350	290	395	320	270	380	395	420	408	380
16	377	347	350	285	390	335	270	370	380	440	410	420
17	380	347	355	290	400	220	340	365	420	444	398	420
18	302	338	362	290	400	225	330	360	418	440	380	440
19	315	336	360	342	400	220	330	360	418	440	380	440
20	343	333	388	315	400	220	290	360	300	442	400	420
21	332	360	392	292	400	225	290	360	280	440	390	390
22	361	357	390	-	390	225	290	375	325	430	395	440
23	369	355	270	345	410	220	340	370	375	410	390	420
24	374	340	268	370	410	225	335	380	375	422	389	430
25	317	320	302	400	410	220	350	390	378	460	415	420
26	320	322	230	240	405	230	350	400	-	422	415	420
27	-	325	258	385	405	215	310	400	399	440	402	420
28	322	325	288	375	-	225	310	400	400	430	404	410
29	335	310	286	370	400	270	310	400	415	438	440	410
30	348	310	310	375	---	235	315	395	410	438	440	420
31	349	---	305	260	---	235	---	400	---	438	440	---
MEAN	346	338	307	327	382	298	298	375	390	409	387	419

WTR YR 1980 MEAN 356 MAX 460 MIN 215

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980 (ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	10.0	4.0	.0	.0	.0	7.0	13.5	24.0	24.0	25.0	27.0
2	16.0	9.0	4.0	.0	.0	.0	9.0	13.5	25.0	23.0	26.0	27.0
3	16.0	7.0	3.0	.0	.0	.0	10.0	14.0	25.0	22.0	26.0	26.5
4	16.0	7.0	2.0	.0	.0	.0	9.5	14.5	24.0	23.0	25.0	26.5
5	16.0	6.0	2.0	.0	.0	.0	9.5	14.5	23.0	22.0	25.0	27.0
6	14.0	5.0	1.0	.0	.0	.0	10.0	15.0	23.0	22.5	26.0	27.0
7	13.0	5.0	.5	.0	.0	.0	10.0	16.0	23.5	23.0	27.0	27.0
8	13.0	5.5	.5	.0	.0	.0	10.0	16.0	24.0	23.0	27.5	26.5
9	10.0	4.5	1.5	.0	.0	.0	10.0	16.5	23.0	23.5	27.5	25.0
10	9.0	4.0	2.5	.5	.0	.0	10.0	17.0	22.0	24.0	27.0	25.0
11	8.0	4.0	1.0	.0	.0	.0	9.0	19.0	22.0	24.0	27.0	24.0
12	7.0	5.0	.5	.0	.0	.0	8.0	17.0	21.0	22.0	26.0	23.0
13	7.0	4.5	.5	.5	.0	1.0	8.0	19.0	22.0	24.5	26.5	23.5
14	7.0	4.0	.5	.5	.0	1.5	8.0	19.0	23.0	22.0	27.0	24.0
15	8.0	4.5	.0	.0	.0	1.5	9.0	21.0	22.5	24.0	26.5	24.0
16	10.0	5.0	.0	.0	.0	1.0	10.0	21.5	23.0	24.0	27.0	17.0
17	11.0	6.0	.0	.0	.0	1.0	11.0	21.0	24.0	25.0	27.5	19.0
18	9.0	7.0	.0	.0	.0	1.5	12.0	20.0	23.0	25.5	27.0	23.0
19	8.0	7.0	.0	.0	.0	1.5	13.0	20.0	23.0	26.0	27.0	25.0
20	7.0	6.5	.0	.5	.0	1.5	13.0	19.0	20.0	25.0	26.5	22.0
21	7.0	7.0	.5	.5	.0	1.5	12.5	22.0	19.0	25.0	26.0	24.5
22	6.0	8.0	.5	.0	.0	1.0	12.5	22.0	23.0	25.0	26.5	26.0
23	6.0	8.0	.5	.0	.0	1.0	11.0	22.0	24.0	25.5	26.0	24.0
24	6.0	8.0	.5	.0	.0	1.0	12.0	22.0	25.0	26.5	25.5	22.0
25	7.0	7.0	.5	.0	.0	1.0	11.0	23.0	25.0	24.0	26.0	20.0
26	7.0	4.0	.0	.0	.0	2.0	11.0	23.0	25.5	24.0	26.0	18.5
27	7.0	3.0	.0	.0	.0	4.0	12.0	23.0	27.0	24.0	26.0	18.0
28	7.0	3.0	.0	.0	.0	7.0	13.0	23.0	26.0	25.0	26.0	17.0
29	8.0	4.0	.0	.0	.0	7.0	12.5	23.0	23.0	25.0	26.5	16.0
30	8.0	3.0	.5	.0	---	6.0	13.0	23.0	20.5	26.0	26.5	15.0
31	9.0	---	.5	.0	---	7.0	---	23.0	---	26.0	27.0	---
MEAN	9.5	5.5	1.0	.0	.0	1.5	10.5	19.0	23.5	24.0	26.5	23.0

WTR YR 1980 MEAN 12.0 MAX 27.5 MIN .0

04214500 BUFFALO CREEK AT GARDENVILLE, NY

LOCATION.--Lat 42°51'16", long 78°45'22", Erie County, Hydrologic Unit 04120103, on left bank 300 ft (91 m) downstream from bridge on Union Road in Gardenville, and 2 mi (3 km) upstream from Cayuga Creek.

DRAINAGE AREA.--144 mi^2 (373 km^2).

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1337: 1939-52. WSP 1912: Drainage area. WRD NY-78-1: 1939-1976 (P).

GAGE.--Water-stage recorder. Datum of gage is 603.65 ft (183.993 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 26, 1968, water-stage recorder at site 400 ft (122 m) downstream at same datum.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--42 years, 198 ft^3/s (5.607 m^3/s), 18.67 in/yr (474 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft^3/s (320 m^3/s) Mar. 1, 1955, Mar. 7, 1956, from rating curve extended above 3,200 ft^3/s (90.6 m^3/s) on basis of slope-area measurement at gage height 7.07 ft (2.155 m); maximum gage height, 14.34 ft (4.371 m) Mar. 21, 1978 (ice jam); minimum discharge, 0.2 ft^3/s (0.006 m^3/s) Sept. 1, 1964, gage height, 0.81 ft (0.247 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,200 ft^3/s (119 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)	Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Dec. 25	1930	*4,380	124	5.99	1.826	Mar. 17	2130	ice jam		*7.15	2.179

Minimum discharge, 11 ft^3/s (0.31 m^3/s) Aug. 28, 29, 30; gage height, 0.71 ft (0.216 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	128	330	191	54	70	747	151	65	103	35	18
2	56	115	290	170	54	64	408	128	79	66	33	269
3	55	123	250	153	52	60	308	108	70	53	222	164
4	55	113	240	90	52	70	350	87	68	46	203	52
5	70	105	354	80	50	150	350	79	52	42	79	31
6	390	96	1010	82	50	130	247	74	43	328	269	24
7	229	191	842	84	52	120	194	70	44	92	98	20
8	272	272	800	90	52	120	167	68	139	60	47	18
9	350	219	346	100	52	190	206	65	115	52	33	22
10	296	1290	236	120	50	300	250	61	92	46	27	35
11	254	480	284	800	47	1000	209	61	68	40	24	23
12	354	258	446	1000	48	600	206	63	53	38	27	18
13	995	197	372	200	49	300	324	79	46	34	26	17
14	554	197	222	170	49	200	288	156	40	32	25	773
15	300	188	160	150	50	150	628	123	43	33	22	381
16	296	280	140	140	48	300	333	87	96	32	21	101
17	191	212	120	269	45	1000	236	70	68	31	18	61
18	170	229	110	341	46	1400	206	113	50	33	16	66
19	170	182	100	222	50	520	164	142	35	28	15	47
20	506	156	110	150	60	842	139	101	206	26	14	36
21	324	134	130	130	100	1920	128	76	470	28	15	33
22	185	134	200	110	200	900	110	66	136	36	13	34
23	159	151	400	100	500	400	103	60	74	126	13	96
24	269	170	835	94	300	450	92	58	55	56	13	81
25	265	210	2800	90	180	1110	87	56	46	42	13	44
26	182	280	1220	80	120	565	85	50	42	34	12	81
27	136	292	441	74	100	623	83	47	38	34	12	65
28	179	265	296	68	92	780	123	44	126	68	12	43
29	216	320	254	62	84	856	372	42	233	81	12	35
30	162	300	261	58	---	856	222	42	182	70	12	32
31	131	---	212	56	---	1190	---	63	---	44	12	---
TOTAL	7832	7287	13811	5524	2686	17236	7365	2490	2874	1834	1393	2720
MEAN	253	243	446	178	92.6	556	246	80.3	95.8	59.2	44.9	90.7
MAX	995	1290	2800	1000	500	1920	747	156	470	328	269	773
MIN	55	96	100	56	45	60	83	42	35	26	12	17
CFSM	1.76	1.69	3.10	1.24	.64	3.86	1.71	.56	.67	.41	.31	.63
IN.	2.02	1.88	3.57	1.43	.69	4.45	1.90	.64	.74	.47	.36	.70

CAL YR 1979 TOTAL 106355 MEAN 291 MAX 5000 MIN 14 CFSM 2.02 IN 27.47
WTR YR 1980 TOTAL 73052 MEAN 200 MAX 2800 MIN 12 CFSM 1.39 IN 18.87

04215000 CAYUGA CREEK NEAR LANCASTER, NY

LOCATION.--Lat 42°53'24", long 78°38'45", Erie County, Hydrologic Unit 04120103, on right bank 150 ft (46 m) upstream from low dam in Como Lake Park, 700 ft (210 m) downstream from bridge on Bowen Road, 800 ft (240 m) downstream from Little Buffalo Creek, and 2 mi (3.2 km) southeast of Lancaster.

DRAINAGE AREA.--94.9 mi^2 (246 km^2).

PERIOD OF RECORD.--September 1938 to September 1968. October 1971 to April 1974 (peak discharges only). May 1974 to current year.

GAGE.--Water-stage recorder and low concrete dam as control. Datum of gage is 672.02 ft (204.832 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Since August 1962, undetermined amount of flow diverted by Lancaster Country Club for irrigation upstream from station. Concrete dam configuration modified in September 1974 resulting in a lower point of zero flow.

AVERAGE DISCHARGE.--36 years (1938-68, 1975-80) 129 ft^3/s (3.653 m^3/s), 18.46 in/yr (469 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,440 ft^3/s (267 m^3/s Sept. 14, 1979, gage height 10.48 ft (3.194 m); maximum gage height, 12.58 ft (3.834 m) Mar. 30, 1960 (ice jam); practically no flow part of Aug. 8, 9, 1939, when stoplogs were installed in the dam.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft^3/s (79.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 25	1830	3,150	89.2	7.00	2.134	Mar. 21	unknown	*3,470	98.3	*7.19	2.192

Minimum discharge, 2.5 ft^3/s (0.071 m^3/s) Aug. 28, 1980, gage height, 2.59 ft (0.789 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	57	160	138	36	35	330	106	58	88	30	10
2	17	56	170	123	35	33	250	76	76	49	28	290
3	17	61	160	102	34	31	210	59	64	35	110	200
4	17	57	160	51	33	30	180	48	60	25	66	54
5	26	52	239	45	32	90	150	39	32	22	25	21
6	214	45	624	40	31	70	130	35	21	72	150	10
7	115	110	472	42	30	60	110	33	19	29	72	5.4
8	111	166	439	40	29	70	100	27	195	21	25	4.0
9	159	159	201	44	30	100	142	27	119	21	14	6.2
10	162	997	159	47	31	150	208	26	111	21	12	6.2
11	107	329	167	608	30	500	164	25	69	19	12	3.4
12	181	192	214	739	30	270	147	25	38	17	11	3.4
13	837	154	221	225	31	150	218	39	25	16	9.6	3.2
14	395	157	142	164	32	90	205	94	19	14	9.0	680
15	186	144	90	170	32	70	401	67	17	13	9.2	520
16	158	186	70	167	32	130	239	42	83	14	7.0	120
17	110	144	54	178	32	360	172	32	39	14	6.2	40
18	98	140	50	242	32	800	144	74	22	11	5.4	22
19	96	106	50	167	32	500	117	92	16	6.4	5.2	11
20	391	86	52	115	32	600	96	53	287	6.2	5.0	7.4
21	218	75	56	60	32	1600	82	36	486	6.7	4.9	6.2
22	127	74	68	50	80	700	67	29	127	11	4.7	6.4
23	94	97	350	40	355	350	57	24	53	24	4.4	18
24	216	109	583	35	242	400	50	20	32	14	4.2	17
25	207	142	1860	40	164	360	48	18	23	9.3	4.0	10
26	129	178	875	41	90	300	46	15	18	6.7	3.6	14
27	89	172	282	40	64	350	43	14	15	7.9	3.1	9.4
28	115	150	201	39	50	340	88	13	228	72	2.8	6.4
29	133	170	183	38	40	390	254	12	300	86	3.1	5.6
30	92	130	186	37	---	400	154	11	167	86	3.6	5.6
31	68	---	157	36	---	440	---	47	---	50	2.8	---
TOTAL	4903	4695	8695	3903	1753	9769	4602	1258	2819	887.2	652.8	2115.8
MEAN	158	157	280	126	60.4	315	153	40.6	94.0	28.6	21.1	70.5
MAX	837	997	1860	739	355	1600	401	106	486	88	150	680
MIN	17	45	50	35	29	30	43	11	15	6.2	2.8	3.2
CFSM	1.67	1.65	2.95	1.33	.64	3.32	1.61	.43	.99	.30	.22	.74
IN.	1.92	1.84	3.41	1.53	.69	3.83	1.80	.49	1.11	.35	.26	.83

CAL YR 1979 TOTAL 72621.1 MEAN 199 MAX 4420 MIN 1.5 CFSM 2.10 IN 28.47
WTR YR 1980 TOTAL 46052.8 MEAN 126 MAX 1860 MIN 2.8 CFSM 1.33 IN 18.05

04215500 CAZENOVIA CREEK AT EBENEZER, NY

LOCATION.--Lat 42°49'47", long 78°46'33", Erie County, Hydrologic Unit 04120103, on right bank 30 ft (9 m) upstream from bridge on Ridge Road in Ebenezer, 4.4 mi (7.1 km) upstream from mouth, and 5 mi (8 km) southeast of Buffalo.

DRAINAGE AREA.--134 mi^2 (347 km^2).

PERIOD OF RECORD.--June 1940 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1973: 1972 (M).

GAGE.--Water-stage recorder. Datum of gage is 604.86 ft (184.361 m) National Geodetic Vertical Datum of 1929. Prior to Apr. 4, 1955, at datum 2.00 ft (0.610 m) higher. Apr. 4 to Oct. 12, 1955, nonrecording gage at temporary site 1.3 mi (2.1 km) downstream at different datum.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--40 years (1941-80), 230 ft^3/s (6.514 m^3/s), 23.31 in/yr (592 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft^3/s (383 m^3/s) Mar. 1, 1955, gage height, 15.82 ft (4.822 m) present datum, from rating curve extended above 7,700 ft^3/s (218 m^3/s); minimum 2.6 ft^3/s (0.074 m^3/s) Nov. 7, 1953; minimum gage height, 1.87 ft (0.570 m) June 28, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft^3/s (113 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Dec. 25	1800	4,690	133	8.19	2.496	Mar. 21	2100	*5,230	148	*8.65	2.636

Minimum discharge, 14 ft^3/s (0.40 m^3/s) Sept. 10, gage height, 1.89 ft (0.576 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	103	389	180	76	120	930	151	59	70	24	41
2	23	106	354	150	74	100	576	115	89	51	23	438
3	22	121	310	130	70	96	438	98	70	42	418	319
4	23	106	305	110	68	88	480	89	72	35	268	82
5	49	89	418	160	66	110	443	74	49	53	95	49
6	365	77	1070	180	64	130	314	70	38	370	189	35
7	277	240	1050	140	62	150	240	63	42	98	118	28
8	282	296	912	120	60	165	201	57	177	63	57	25
9	334	218	448	120	58	310	273	53	112	53	42	30
10	277	1460	314	110	56	453	273	47	106	41	34	30
11	324	537	511	900	54	1250	263	47	72	35	31	30
12	459	300	973	1140	54	610	277	53	53	30	53	24
13	1100	218	587	290	52	344	474	82	42	27	53	22
14	675	209	310	280	52	173	389	201	37	25	44	604
15	370	197	218	250	50	173	742	154	44	25	30	235
16	286	310	181	230	49	209	428	103	134	24	35	89
17	177	205	150	280	48	1010	296	82	74	23	29	59
18	154	310	140	384	47	1620	244	137	47	24	25	57
19	151	193	130	240	46	708	177	218	38	22	22	47
20	593	151	120	173	46	1070	144	137	537	20	21	38
21	354	124	110	130	130	2580	127	92	823	21	20	35
22	181	124	170	130	280	1390	103	74	185	87	18	39
23	147	177	632	120	1030	686	92	61	95	147	18	118
24	310	235	1070	110	464	697	82	53	65	51	18	87
25	334	282	2750	110	268	1050	77	47	51	31	18	47
26	205	500	1330	100	170	627	72	39	42	25	17	103
27	134	354	532	96	150	670	70	38	37	41	16	67
28	209	339	365	90	150	894	131	36	189	51	19	44
29	226	433	290	86	140	1180	403	35	231	82	17	35
30	158	413	250	82	---	1110	235	37	121	47	18	31
31	124	---	210	78	---	1480	---	74	---	30	18	---
TOTAL	8348	8427	16599	6699	3934	21253	8994	2617	3731	1744	1808	2888
MEAN	269	281	535	216	136	686	300	84.4	124	56.3	58.3	96.3
MAX	1100	1460	2750	1140	1030	2580	930	218	823	370	418	604
MIN	22	77	110	78	46	88	70	35	37	20	16	22
CFSM	2.01	2.10	3.99	1.61	1.02	5.12	2.24	.63	.93	.42	.44	.72
IN.	2.32	2.34	4.61	1.86	1.09	5.90	2.50	.73	1.04	.48	.50	.80

CAL YR 1979 TOTAL 115136 MEAN 315 MAX 6480 MIN 14 CFSM 2.35 IN 31.96
WTR YR 1980 TOTAL 87042 MEAN 238 MAX 2750 MIN 16 CFSM 1.78 IN 24.16

04215900 LAKE ERIE AT BUFFALO, NY

LOCATION.--Lat 42°52'39", long 78°53'26", Erie County, Hydrologic Unit 04120200, near outer end of Buffalo River South Pier, at Buffalo.

DRAINAGE AREA.--263,700 mi² (683,000 km²).

PERIOD OF RECORD.--January 1860 to current year. Records prior to October 1960 in files of Lake Survey Center.

REVISED RECORDS.--WDR NY-75-1: 1974.

GAGE.--Water-stage recorder. Elevations are in feet International Great Lakes Datum (1955). Prior to Feb. 5, 1899, nonrecording gages.

COOPERATION.--Records furnished by U.S. Department of Commerce, NOAA-NOS, Lake Survey Center, Detroit, Mich.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 579.09 ft (176.507 m) Nov. 3, 1955; minimum 564.17 ft (171.959 m) Mar. 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 577.42 ft (175.998 m) Jan. 7; minimum elevation, 569.98 ft (173.730 m) Apr. 14.

ELEVATION (FEET IGLD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	571.66	571.72	571.75	571.78	571.60	571.36	572.00	572.42	572.21	572.42	572.67	572.66
2	571.64	571.75	571.52	571.87	571.56	571.38	572.08	572.41	572.35	572.42	572.64	572.69
3	572.17	571.66	572.31	571.58	571.61	571.44	571.70	572.45	572.51	572.36	572.73	572.46
4	571.84	571.37	572.20	571.22	571.53	571.33	572.76	572.43	572.44	572.31	572.42	572.43
5	572.16	571.26	572.05	571.33	571.43	571.41	572.56	572.58	572.29	572.54	572.68	572.61
6	572.46	571.49	571.86	571.63	571.12	571.38	572.08	572.37	572.53	572.33	572.77	572.51
7	572.59	571.61	572.37	574.23	571.45	571.24	572.08	572.62	572.41	572.34	572.68	572.36
8	571.88	572.01	572.26	572.70	571.45	571.20	571.98	572.55	572.92	572.58	572.76	572.28
9	571.81	571.20	572.36	571.94	571.42	571.51	572.16	572.44	572.77	572.40	572.65	572.62
10	571.79	571.65	571.42	571.45	571.45	571.61	572.40	572.22	572.75	572.36	572.36	572.42
11	571.80	571.47	571.64	572.91	571.71	572.16	572.28	572.39	572.66	572.53	572.52	572.85
12	572.44	571.08	571.46	573.56	571.64	571.12	572.33	572.34	572.46	572.29	572.90	572.02
13	572.59	571.28	571.19	571.67	571.51	570.94	572.32	572.21	572.41	572.32	572.56	572.07
14	572.10	571.48	571.69	571.67	571.45	571.95	571.64	572.60	572.44	572.29	572.82	572.20
15	572.36	571.85	571.44	571.45	571.10	571.47	572.82	572.38	572.43	572.45	572.56	572.02
16	571.58	571.72	571.71	571.31	571.49	571.22	572.56	572.22	572.39	572.38	572.42	572.17
17	571.70	572.12	571.90	571.77	571.79	571.51	572.41	572.13	572.45	572.53	572.25	572.37
18	571.32	571.40	571.53	571.88	571.62	571.88	572.41	572.56	572.50	572.28	572.47	572.10
19	571.62	571.23	571.06	572.15	571.34	571.48	572.39	572.37	572.50	572.40	572.47	572.18
20	571.68	571.45	571.05	571.94	571.29	571.42	572.46	572.26	573.26	572.35	572.35	572.26
21	571.70	570.97	571.19	572.15	571.21	572.33	572.44	572.36	572.66	572.49	572.33	572.25
22	571.54	571.37	571.30	572.33	571.43	572.01	572.20	572.38	572.42	572.58	572.43	572.17
23	572.60	571.36	571.32	572.61	571.38	571.63	572.35	572.31	572.40	572.49	572.35	572.20
24	572.48	571.59	571.19	572.06	571.84	571.61	572.26	572.33	572.41	572.37	572.33	571.92
25	571.82	571.05	571.37	571.64	571.21	572.02	572.47	572.24	572.39	572.41	572.36	572.09
26	571.60	572.72	571.88	571.94	571.61	571.86	572.34	572.28	572.47	572.34	572.42	572.72
27	571.40	572.14	571.93	571.67	571.85	571.75	572.05	572.37	572.42	572.21	572.43	572.29
28	572.01	572.40	572.42	571.94	571.34	571.73	572.31	572.24	572.18	572.35	572.18	571.83
29	571.43	572.37	572.39	572.01	571.42	571.74	572.34	572.20	572.51	572.56	572.26	571.81
30	570.79	572.90	572.06	571.53	---	571.44	572.39	572.35	572.63	572.54	572.36	572.01
31	571.24	---	571.74	571.48	---	571.59	---	572.52	---	572.31	572.50	---
MEAN	571.86	571.66	571.73	571.98	571.48	571.57	572.29	572.37	572.51	572.40	572.50	572.29
MAX	572.60	572.90	572.42	574.23	571.85	572.33	572.82	572.62	573.26	572.58	572.90	572.85
MIN	570.79	570.97	571.05	571.22	571.10	570.94	571.64	572.13	572.18	572.21	572.18	571.81

CAL YR 1979 MEAN 571.60 MAX 574.66 MIN 569.28
WTR YR 1980 MEAN 572.05 MAX 574.23 MIN 570.79

04216000 NIAGARA RIVER AT BUFFALO, NY

LOCATION.--Lat 42°52'40", long 78°53'25", Erie County, Hydrologic Unit 04120200, at head of Niagara River at Buffalo.

DRAINAGE AREA.--263,700 mi^2 (683,000 km^2).

PERIOD OF RECORD.--January 1860 to September 1960 (monthly discharges only published in WSP 1912), October 1960 to current year. Records of January 1926 to September 1960 daily discharges available in files of U.S. Department of Commerce and U.S. Geological Survey.

REVISED RECORDS.--WSP 1912: 1862(M), 1955 (M), 1936 (M), WDR NY-77-1: Drainage area.

GAGE.--Discharge determined from several powerplants at Niagara Falls and discharge over the falls. Discharge before 1926 determined from records of Corps of Engineers gages at Buffalo and Cleveland.

REMARKS.--Records do not include water diverted from Lake Michigan by Illinois and Michigan Canal during period of its operation prior to 1910 and by Chicago Sanitary and Ship Canal, which began operation in 1900, and from Lake Erie by Welland and New York State Canals before 1918. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake project, which began operation in July 1939, and by the Ogoki project, which began operation in July 1943. Figures of monthly mean discharge for 1860 to 1960 and daily discharge for 1961 to 1965, published in WSP 1912, are the official records of the U.S. Lake Survey, and have been coordinated with and concurred by the counterpart Canadian agencies, as have been the extremes for period of record through December 1976 and records October 1977 to current year.

COOPERATION.--Records of daily discharge furnished by Detroit District Corps of Engineers and Canada Department of the Environment.

AVERAGE DISCHARGE.--120 years, 204,000 ft^3/s (5,777 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 299,000 ft^3/s (8,470 m^3/s) Nov. 17, 1955; minimum daily, 90,000 ft^3/s (2,550 m^3/s) Jan. 13, 1964. Maximum monthly mean discharge, 264,700 ft^3/s (7,500 m^3/s) May 1974; minimum monthly mean, 116,200 ft^3/s (3,290 m^3/s) February 1936.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 284,000 ft^3/s (8,043 m^3/s) Jan. 12; minimum daily discharge, 203,000 ft^3/s (5,749 m^3/s) Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222000	222000	233000	227000	203000	224000	238000	246000	239000	241000	241000	246000
2	221000	229000	218000	230000	208000	222000	237000	246000	242000	239000	240000	248000
3	230000	221000	232000	223000	215000	219000	230000	247000	243000	237000	246000	240000
4	228000	219000	242000	214000	216000	214000	247000	246000	243000	237000	239000	239000
5	230000	215000	234000	214000	217000	216000	251000	248000	239000	241000	242000	246000
6	240000	217000	231000	225000	212000	216000	239000	245000	243000	236000	245000	242000
7	249000	223000	235000	272000	216000	213000	235000	247000	241000	236000	243000	238000
8	228000	233000	251000	254000	219000	209000	229000	248000	256000	242000	246000	238000
9	226000	215000	238000	235000	218000	221000	233000	246000	248000	238000	243000	242000
10	225000	226000	223000	219000	218000	218000	238000	241000	250000	235000	236000	238000
11	229000	221000	227000	240000	221000	233000	240000	245000	249000	241000	238000	249000
12	237000	213000	219000	284000	223000	213000	242000	240000	242000	234000	250000	234000
13	251000	212000	210000	228000	220000	204000	239000	240000	241000	235000	241000	228000
14	233000	219000	226000	227000	218000	227000	219000	247000	242000	235000	246000	239000
15	240000	230000	218000	221000	213000	220000	250000	244000	242000	237000	242000	228000
16	224000	217000	226000	217000	214000	210000	246000	239000	239000	236000	236000	234000
17	223000	244000	225000	225000	223000	219000	246000	238000	243000	238000	236000	237000
18	216000	219000	224000	232000	224000	233000	243000	246000	243000	234000	238000	234000
19	221000	212000	210000	236000	218000	221000	245000	243000	240000	235000	239000	233000
20	227000	221000	206000	234000	216000	222000	243000	239000	259000	235000	236000	238000
21	227000	207000	212000	234000	214000	240000	243000	241000	248000	236000	235000	236000
22	221000	218000	216000	239000	213000	248000	238000	243000	243000	240000	238000	234000
23	242000	217000	217000	242000	221000	231000	240000	242000	240000	239000	237000	236000
24	246000	225000	216000	233000	229000	225000	236000	239000	240000	234000	237000	228000
25	229000	214000	226000	219000	218000	237000	243000	238000	240000	236000	237000	231000
26	224000	239000	238000	228000	216000	234000	240000	239000	241000	235000	238000	246000
27	218000	247000	239000	222000	223000	231000	235000	240000	241000	232000	239000	236000
28	232000	239000	244000	218000	216000	229000	238000	238000	237000	234000	234000	229000
29	220000	242000	246000	208000	218000	229000	241000	237000	240000	238000	233000	225000
30	206000	253000	241000	210000	---	224000	243000	239000	244000	238000	237000	230000
31	213000	---	228000	208000	---	222000	---	246000	---	235000	241000	---
TOTAL	7078000	6729000	7051000	7118000	6300000	6924000	7187000	7523000	7298000	7339000	7429000	7102000
MEAN	228300	224300	227500	229600	217200	223400	239600	242700	243300	236700	239600	236700
MAX	251000	253000	251000	284000	229000	248000	251000	248000	259000	242000	250000	249000
MIN	206000	207000	206000	208000	203000	204000	219000	237000	237000	232000	233000	225000

CAL YR 1979 TOTAL 80761000 MEAN 221300 MAX 265000 MIN 175000
WTR YR 1980 TOTAL 85078000 MEAN 232500 MAX 284000 MIN 203000

04216200 SCAJAQUADA CREEK AT BUFFALO, NY

LOCATION.--Lat 42°54'41", long 78°47'48", Erie County, Hydrologic Unit 04120103, on right bank 58 ft (18 m) upstream from point where stream goes underground in concrete-lined tunnel, 86 ft (26 m) upstream from Pine Ridge Road, and 0.2 mi (0.3 km) east of boundary line of city of Buffalo.

DRAINAGE AREA.--15.9 mi² (41.2 km²).

PERIOD OF RECORD.--Feburary 1957 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 626.26 ft (190.884 m) National Geodetic Vertical Datum of 1929 (city of Buffalo bench mark).

REMARKS.--Records good. Discharge includes flow diverted from Lake Erie and Niagara River as sewage-plant effluent entering basin upstream from station.

COOPERATION.--Town of Cheektowaga maintains records of sewage-plant discharge.

AVERAGE DISCHARGE.--23 years, 35.4 ft³/s (1.003 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,620 ft³/s (74.2 m³/s) Aug. 7, 1963, gage height, 14.38 ft (4.383 m); minimum, 3.9 ft³/s (0.11 m³/s) Aug. 24, 1978, gage height, 1.46 ft (0.445 m) result of channel improvement project upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (17 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 12	2230	754	21.4	5.92	1.804	June 8	0115	1,110	31.4	7.68	2.341
Nov. 10	0300	644	18.2	5.35	1.631	June 28	1500	658	18.6	5.42	1.652
Dec. 25	1445	642	18.2	5.34	1.628	Aug. 3	0730	*1,770	50.1	*10.72	3.267
Mar. 21	1815	783	22.2	6.09	1.856	Sept. 14	1700	610	17.3	5.17	1.576

Minimum discharge, 7.4 ft³/s (0.21 m³/s) June 1, gage height, 1.58 ft (0.482 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	17	21	19	14	14	55	21	25	19	17	195
2	14	19	33	19	14	13	32	20	33	27	18	290
3	20	18	41	19	13	13	25	18	31	18	616	34
4	25	16	52	18	14	14	94	16	19	15	60	20
5	77	16	117	17	14	43	47	17	16	16	67	18
6	42	15	365	16	14	27	25	17	16	15	53	16
7	30	47	199	18	14	23	22	17	57	15	25	14
8	20	73	205	17	14	31	19	17	284	22	21	16
9	45	145	45	18	13	32	34	17	41	16	18	27
10	21	251	35	18	12	102	23	16	26	15	16	22
11	19	46	92	193	13	79	22	17	20	16	18	16
12	166	30	122	68	13	26	70	17	18	14	19	15
13	153	29	50	25	13	19	45	49	17	13	16	15
14	43	26	29	23	14	18	115	22	16	14	18	226
15	25	42	23	22	14	21	108	17	19	17	17	47
16	21	46	21	21	14	41	48	16	19	16	15	23
17	20	26	20	75	12	145	29	15	16	25	14	26
18	24	21	18	57	13	94	24	101	16	20	15	19
19	18	20	18	33	18	52	22	30	16	15	16	17
20	82	18	18	23	20	57	20	21	158	13	16	17
21	30	18	19	19	32	396	20	18	62	21	16	19
22	22	27	27	18	55	109	19	18	23	111	16	20
23	31	30	94	17	52	79	18	17	19	30	15	61
24	65	57	160	17	32	130	17	17	18	18	13	19
25	30	34	361	16	29	132	17	15	17	17	15	17
26	21	71	117	15	22	58	16	15	17	16	16	67
27	18	35	42	14	18	47	22	16	17	28	15	20
28	26	31	30	14	17	39	63	16	125	70	15	17
29	19	24	25	15	15	47	43	16	38	89	15	17
30	18	20	23	14	---	42	26	16	26	27	22	16
31	17	---	21	14	---	162	---	20	---	19	14	---
TOTAL	1176	1268	2443	892	552	2105	1140	665	1225	787	1247	1346
MEAN	37.9	42.3	78.8	28.8	19.0	67.9	38.0	21.5	40.8	25.4	40.2	44.9
MAX	166	251	365	193	55	396	115	101	284	111	616	290
MIN	14	15	18	14	12	13	16	15	16	13	13	14
CFSM	2.38	2.66	4.96	1.81	1.20	4.27	2.39	1.35	2.57	1.60	2.53	2.82
IN.	2.75	2.97	5.72	2.09	1.29	4.92	2.67	1.56	2.87	1.84	2.92	3.15

CAL YR 1979 TOTAL 16615 MEAN 45.5 MAX 1370 MIN 12 CFSM 2.86 IN 38.87
WTR YR 1980 TOTAL 14846 MEAN 40.6 MAX 616 MIN 12 CFSM 2.55 IN 34.73

04216418 TONAWANDA CREEK AT ATTICA, NY

LOCATION.--Lat 42°51'50", long 78°17'02", Wyoming County, Hydrologic Unit 04120104, on right bank behind Village Hall and fire station, 150 ft (46 m) downstream from bridge on State Highway 238 (Main Street) at Attica, and 0.4 mi (0.6 km) upstream from Tannery Creek.

DRAINAGE AREA.--77.1 mi^2 (200 km^2).

PERIOD OF RECORD.--October 1977 to current year.

REVISED RECORDS.--WDR-79-1: 1978 (M).

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 954.63 ft (290.971 m) National Geodetic Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,690 ft^3/s (133 m^3/s) Sept. 14, 1979, gage height, 9.10 ft (2.774 m); maximum gage height 12.40 ft (3.780 m) Feb. 18, 1979 (backwater from ice); minimum discharge, 9.2 ft^3/s (0.26 m^3/s) Sept. 2, 3, 7, 8, 1978, gage height, 3.38 ft (1.030 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, about 6,000 ft^3/s (170 m^3/s) June 23, 1972, gage height about 12.0 ft (3.66 m) present site and datum, from information supplied by Village of Attica.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 25	1530	2,230	63.2	6.85	2.088	Mar. 21	2000	*2,460	69.7	*7.07	2.155
Jan. 11	2130	1,600	45.3	6.17	1.881	Mar. 31	1045	1,300	36.8	5.81	1.771
Mar. 17	2300	1,450	41.1	6.00	1.829						

Minimum discharge, 10 ft^3/s (0.28 m^3/s) Aug. 27, 28, 29, 30, 31, Sept. 1, gage height, 3.38 ft (1.030 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	58	124	114	26	28	405	88	26	71	13	11
2	18	53	124	102	26	26	265	74	32	46	13	121
3	18	51	103	80	26	26	219	61	32	38	53	80
4	18	51	104	40	26	28	283	61	32	30	46	28
5	26	44	131	40	24	46	219	48	25	170	23	20
6	162	42	313	40	30	88	150	46	23	162	94	17
7	74	66	281	58	30	92	131	44	26	53	38	17
8	74	91	273	58	28	80	158	40	117	42	30	15
9	124	68	138	66	28	100	146	40	58	36	25	17
10	101	420	119	72	26	140	158	40	53	32	20	25
11	71	182	142	390	28	210	142	38	42	26	18	18
12	80	114	204	343	26	130	121	40	32	23	21	15
13	336	91	167	131	26	63	101	56	26	21	18	14
14	211	88	109	130	26	56	88	91	25	20	15	372
15	117	85	66	150	24	46	80	74	26	20	21	202
16	107	82	56	130	22	48	68	51	77	20	20	68
17	77	77	40	130	20	510	63	44	36	17	15	50
18	71	74	40	172	20	680	61	63	26	17	14	54
19	68	71	40	120	22	320	61	74	23	17	14	35
20	204	61	40	90	28	491	58	53	91	17	14	24
21	124	56	42	64	32	1210	56	42	166	17	13	19
22	80	53	44	56	48	520	71	42	53	48	11	20
23	74	53	160	44	150	302	63	36	36	53	11	60
24	128	51	360	28	86	326	63	32	28	26	13	54
25	117	51	1500	28	44	497	61	30	25	20	11	23
26	85	71	558	28	34	265	58	26	21	15	11	45
27	66	96	253	28	32	312	56	23	21	17	11	43
28	85	101	183	28	30	394	110	23	174	20	10	24
29	98	124	158	26	30	543	186	25	131	23	10	18
30	80	123	151	26	---	480	121	32	182	17	10	17
31	63	---	128	26	---	735	---	40	---	14	10	---
TOTAL	2975	2648	6151	2838	998	8792	3822	1477	1665	1148	646	1526
MEAN	96.0	88.3	198	91.5	34.4	284	127	47.6	55.5	37.0	20.8	50.9
MAX	336	420	1500	390	150	1210	405	91	182	170	94	372
MIN	18	42	40	26	20	26	56	23	21	14	10	11
CFSM	1.24	1.15	2.57	1.19	.45	3.68	1.65	.62	.72	.48	.27	.66
IN.	1.43	1.28	2.97	1.37	.48	4.24	1.84	.71	.80	.55	.31	.74

CAL YR 1979 TOTAL 54142 MEAN 148 MAX 1980 MIN 17 CFSM 1.92 IN 26.11
WTR YR 1980 TOTAL 34686 MEAN 94.8 MAX 1500 MIN 10 CFSM 1.23 IN 16.73

04216500 LITTLE TONAWANDA CREEK AT LINDEN, NY

LOCATION.--Lat 42°52'37", long 78°09'48", Genesee County, Hydrologic Unit 04120104, on right bank at upstream side of bridge on County Highway 13A (Depot Road) in Linden and 7 mi (11 km) upstream from mouth.

DRAINAGE AREA.--22.1 mi^2/s (57.2 km^2).

PERIOD OF RECORD.--July 1912 to September 1968, October 1977 to current year.

GAGE.--Water-stage recorder. Concrete control since Oct. 15, 1930. Datum of gage is 1,081.62 ft (329.678 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 26, 1943, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--58 years (1912-19, 1920-68, 1978-80), 27.2 ft^3/s (0.770 m^3/s), 16.71 in/yr (424 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft^3/s (76.5 m^3/s) Mar. 7, 1956, gage height, 16.04 ft (4.889 m), from high-water mark; minimum, 0.08 ft^3/s (0.002 m^3/s) Aug. 3, 4, 1955; minimum gage height, -0.14 ft (-0.043 m) Jan. 17, 1966 (siphonic action).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 530 ft^3/s (15.0 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Dec. 25	1915	*800	22.7	*6.84	2.085	Mar. 21	2100	613	17.4	5.87	1.789

Minimum discharge, 0.70 ft^3/s (0.020 m^3/s) Mar. 3, gage height, 0.32 ft (0.098 m); minimum gage height, -0.11 ft (-0.034 m) Feb. 6 (siphonic action).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	12	23	30	2.4	3.1	150	29	5.0	19	2.1	1.0
2	3.0	12	21	27	2.2	2.2	90	23	6.9	14	2.1	5.6
3	3.2	13	18	22	2.2	1.6	64	20	6.7	11	2.7	7.7
4	3.2	12	18	15	2.1	1.8	74	16	6.8	8.0	2.2	3.4
5	5.4	11	21	15	1.9	2.7	65	14	5.0	9.2	2.1	2.4
6	25	10	42	12	1.9	3.9	47	12	4.5	22	2.6	1.8
7	12	19	42	12	2.0	4.8	37	12	3.9	12	2.4	1.4
8	15	21	55	12	2.0	6.2	32	11	30	8.4	2.1	1.4
9	20	17	28	12	2.0	8.6	39	10	14	7.0	1.9	1.3
10	17	79	24	11	2.1	19	33	9.4	12	6.0	1.7	1.6
11	13	45	26	55	2.0	66	29	9.7	9.7	4.8	1.9	1.4
12	13	31	26	119	1.9	23	30	9.7	7.3	4.0	1.8	1.2
13	52	24	27	42	2.0	18	37	18	5.6	4.1	1.6	1.2
14	54	22	20	38	2.1	15	44	27	4.7	3.3	1.6	16
15	27	19	16	48	2.0	12	71	21	5.4	2.9	1.6	24
16	21	18	16	37	2.0	14	46	16	14	3.1	1.4	18
17	16	17	13	37	1.8	100	34	13	7.6	2.6	1.5	14
18	15	16	12	49	2.1	209	29	19	5.6	2.6	1.5	12
19	14	15	12	34	5.8	96	25	20	4.5	2.6	1.5	10
20	37	13	11	25	6.3	143	22	16	9.2	2.6	1.4	9.4
21	27	12	12	18	8.0	332	20	13	24	2.9	1.3	8.1
22	18	11	12	15	12	209	17	11	11	3.3	1.2	7.9
23	15	10	41	15	28	93	15	9.7	7.4	4.4	1.2	11
24	21	10	84	13	17	93	14	8.8	4.8	3.3	1.2	15
25	22	10	410	12	14	159	14	7.5	3.9	2.4	1.1	16
26	16	17	235	11	11	82	13	6.7	3.8	2.3	1.0	7.3
27	14	21	82	11	9.0	93	13	6.0	4.6	2.2	1.0	6.8
28	21	24	53	11	6.0	118	49	5.1	59	2.7	.98	5.6
29	21	26	47	9.4	5.4	146	73	5.3	66	3.0	1.1	5.9
30	16	24	44	7.8	---	157	40	5.4	33	2.5	.99	5.4
31	13	---	35	4.1	---	193	---	6.1	---	2.3	.94	---
TOTAL	572.5	591	1526	779.3	159.2	2424.9	1266	410.4	385.9	180.5	49.71	223.8
MEAN	18.5	19.7	49.2	25.1	5.49	78.2	42.2	13.2	12.9	5.82	1.60	7.46
MAX	54	79	410	119	28	332	150	29	66	22	2.7	24
MIN	2.7	10	11	4.1	1.8	1.6	13	5.1	3.8	2.2	.94	1.0
CFSM	.84	.89	2.23	1.14	.25	3.54	1.91	.60	.58	.26	.07	.34
IN.	.96	.99	2.57	1.31	.27	4.08	2.13	.69	.65	.30	.08	.38

CAL YR 1979 TOTAL 14307.44 MEAN 39.2 MAX 707 MIN .64 CFSM 1.77 IN 24.08
WTR YR 1980 TOTAL 8569.21 MEAN 23.4 MAX 410 MIN .94 CFSM 1.06 IN 14.42

04217000 TONAWANDA CREEK AT BATAVIA, NY
(National stream-quality accounting network station)

LOCATION.--Lat 42°59'51", long 78°11'20", Genesee County, Hydrologic Unit 04120104, on right bank 150 ft (46 m) downstream from municipal dam, 500 ft (152 m) upstream from bridge on Walnut Street in Batavia, and 5.0 mi (8.0 km) downstream from Little Tonawanda Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--171 mi^2 (443 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1944 to current year.

REVISED RECORDS.--WSP 1627: 1956-57. WSP 1912: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 876.33 ft (267.105 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Diversion upstream from station by city of Batavia for municipal supply; sewage, which may include water from municipal and industrial wells upstream from gage, enters creek downstream from gage.

COOPERATION.--City of Batavia maintains records of diversion.

AVERAGE DISCHARGE.--36 years, 208 ft^3/s (5.891 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,200 ft^3/s (204 m^3/s) Mar. 31, 1960, gage height 12.70 ft (3.871 m); maximum gage height, 13.85 ft (4.221 m) Apr. 6, 1947; minimum discharge, 0.4 ft^3/s (0.011 m^3/s) Aug. 5-7, 1955; minimum gage height, 0.59 ft (0.180 m) July 26, 27, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage 14.5 ft (4.42 m) in March 1942, from records of city of Batavia.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft^3/s (51 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Dec. 26	1000	*3,440	97.4	*8.56	2.609	Mar. 22	1630	2,270	64.3	6.50	1.981

Minimum discharge, 9.0 ft^3/s (0.25 m^3/s) Aug. 31, gage height, 1.30 ft (0.396 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	118	219	269	74	81	1260	222	99	210	26	18
2	42	113	216	220	74	74	794	178	93	137	26	84
3	41	123	185	170	72	69	504	155	90	122	38	167
4	40	111	186	138	70	69	459	134	91	90	83	73
5	47	102	187	120	70	73	495	121	71	73	52	44
6	207	95	380	110	68	94	393	106	56	288	62	34
7	185	106	448	100	68	109	309	100	53	141	93	30
8	159	220	442	100	66	97	267	94	342	88	45	26
9	153	162	326	98	66	106	272	89	281	75	41	25
10	248	435	230	98	64	127	293	86	177	66	37	31
11	145	547	222	148	64	430	251	83	138	53	28	33
12	142	314	285	599	62	361	225	86	101	48	29	26
13	339	223	306	508	62	226	291	91	79	42	27	22
14	517	204	213	382	60	168	253	174	66	39	24	126
15	287	196	164	360	61	145	485	164	60	35	32	387
16	237	208	146	327	60	123	385	122	103	36	32	153
17	175	186	119	300	60	340	293	100	100	33	27	83
18	144	186	86	381	62	1000	251	101	66	28	23	83
19	146	169	84	308	62	1230	217	150	53	30	20	66
20	260	144	82	233	64	921	190	122	72	30	21	47
21	419	132	80	168	66	1080	172	98	322	33	19	42
22	218	127	84	151	97	1870	155	88	174	30	15	38
23	158	129	224	130	267	1250	138	79	100	83	14	52
24	214	126	505	82	257	732	127	70	72	56	17	72
25	244	150	1060	82	168	950	119	63	56	39	20	47
26	187	159	2950	80	132	890	116	55	53	31	16	43
27	146	223	1250	80	107	582	112	51	65	32	15	56
28	148	177	518	78	100	753	128	49	72	40	12	43
29	213	240	375	78	88	794	394	46	457	40	12	34
30	172	223	353	76	---	995	290	47	312	41	13	33
31	135	---	301	76	---	912	---	103	---	32	10	---
TOTAL	5813	5648	12226	6050	2591	16651	9638	3227	3874	2121	929	2018
MEAN	188	188	394	195	89.3	537	321	104	129	68.4	30.0	67.3
MAX	517	547	2950	599	267	1870	1260	222	457	288	93	387
MIN	40	95	80	76	60	69	112	46	53	28	10	18
CFSM	1.10	1.10	2.30	1.14	.52	3.14	1.88	.61	.75	.40	.18	.39
IN.	1.26	1.23	2.66	1.32	.56	3.62	2.10	.70	.84	.46	.20	.44

CAL YR 1979 TOTAL 108454 MEAN 297 MAX 4610 MIN 11 CFSM 1.74 IN 23.59
WTR YR 1980 TOTAL 70786 MEAN 193 MAX 2950 MIN 10 CFSM 1.13 IN 15.40

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971, 1978 to current year.
CHEMICAL DATA: 1971 (a), 1978 (c), 1980 (d).
MINOR ELEMENT DATA: 1978-80 (b).
ORGANIC DATA: OC--1978-80 (c).
NUTRIENT DATA: 1971 (a), 1978 (c), 1979-80 (d).
BIOLOGICAL DATA:
Bacteria--1978 (c), 1979-80 (d).
Phytoplankton--1978 (b), 1979-80 (c).
SEDIMENT DATA: 1978 (c), 1979-80 (d).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1978 to current year.
WATER TEMPERATURES: January 1978 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 850 micromhos Mar. 14, 1978; minimum daily, 203 micromhos Apr. 2, 1978.
WATER TEMPERATURES: Maximum daily, 27.0°C July 15, 19, 1979, July 19, 21, 1980; minimum daily, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 730 micromhos June 25; minimum daily, 260 micromhos Mar. 22.
WATER TEMPERATURES: Maximum daily, 27.0°C July 19, 21; minimum daily, freezing point for many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (FT^3/S)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT 23...	1100	155	490	7.5	16.5	8.0	8.0	84	K1100	820	200
NOV 27...	0900	240	475	7.3	8.0	7.0	11.0	96	K690	2800	200
DEC 18...	0800	77	480	7.4	.0	4.0	13.1	91	K720	K24	210
JAN 23...	0900	142	465	7.5	.0	1.0	12.4	89	710	250	210
FEB 19...	1000	63	492	7.4	.0	.50	10.7	79	--	44	220
MAR 27...	1000	590	350	7.2	4.0	.55	11.2	86	K190	550	140
APR 30...	0800	291	344	7.5	10.0	20	9.0	80	2300	920	150
MAY 21...	0900	99	404	7.6	15.0	.60	8.4	84	96	K16	180
JUN 19...	1000	52	440	7.4	22.0	1.0	--	--	64	K6	190
JUL 16...	1300	34	510	7.5	26.0	5.3	7.6	93	K180	K26	220
AUG 06...	1400	35	440	7.6	27.0	5.9	8.4	101	3200	72	200
SEP 04...	1400	64	421	7.4	21.5	2.5	7.9	90	K1600	K72	170

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT 23...	33	63	11	13	3.3	170	41	22	.1	5.8	264
NOV 27...	39	60	12	13	2.1	160	33	21	.1	4.8	258
DEC 18...	47	63	12	13	1.7	160	36	22	.1	5.0	266
JAN 23...	37	63	12	13	1.5	170	34	20	.1	5.3	268
FEB 19...	53	68	13	13	1.5	170	39	26	.1	5.3	277
MAR 27...	17	42	7.9	10	1.7	120	25	18	.1	4.0	197
APR 30...	25	44	8.6	10	1.5	120	22	15	.1	3.3	202
MAY 21...	28	53	11	13	1.4	150	27	17	.1	3.0	237
JUN 19...	29	56	12	14	2.2	160	28	22	.2	3.4	271
JUL 16...	26	65	13	14	2.3	190	28	22	.1	3.6	324
AUG 06...	41	59	13	12	2.4	160	33	21	.1	4.9	275
SEP 04...	53	51	11	12	4.2	120	37	22	.1	6.6	221

K Results based on colony count outside the acceptable range (non-ideal colony count).

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)
OCT 23...	263	.44	.45	.02	.01	.74	.60	.76	.61	1.2	1.1
NOV 27...	245	.58	.56	.08	.06	.46	.45	.54	.51	1.1	1.1
DEC 18...	253	1.0	1.0	.00	.00	.32	.22	.32	.22	1.3	1.2
JAN 23...	257	1.2	1.2	.10	.10	.23	.23	.33	.33	1.5	1.5
FEB 19...	274	1.4	1.4	.11	.17	.25	.22	.36	.39	1.8	1.8
MAR 27...	186	1.2	1.2	.07	.07	.39	.33	.46	.40	1.7	1.6
APR 30...	179	.48	.55	.02	.03	.32	.11	.34	.14	.82	.69
MAY 21...	217	.47	.36	.02	.11	.20	.17	.22	.28	.69	.64
JUN 19...	237	.66	.67	.09	.07	.44	.31	.53	.38	1.2	1.1
JUL 16...	265	.62	.61	.09	.07	.36	.43	.45	.50	1.1	1.1
AUG 06...	244	.46	.45	.05	.03	.14	.36	.19	.39	.65	.84
SEP 04...	219	.63	.64	.10	.01	.46	.34	.56	.35	1.2	.99

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
OCT 23...	.05	.02	--	--	--	--	--	--	--	--	--
NOV 27...	.04	.02	--	--	--	--	--	--	--	--	--
DEC 18...	.03	.01	--	--	--	--	--	--	--	--	--
JAN 23...	.02	.01	1	0	200	60	0	1	20	10	0
FEB 19...	.04	.03	--	--	--	--	--	--	--	--	--
MAR 27...	.09	.02	1	3	50	50	0	2	20	<10	0
APR 30...	.06	.01	--	--	--	--	--	--	--	--	--
MAY 21...	.04	.02	--	--	--	--	--	--	--	--	--
JUN 19...	.06	.03	1	1	100	70	1	0	10	10	0
JUL 16...	.07	.02	--	--	--	--	--	--	--	--	--
AUG 06...	.07	.05	2	2	<50	100	1	1	20	10	0
SEP 04...	.11	.04	--	--	--	--	--	--	--	--	--

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 to SEPTEMBER 1980

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT											
23...	--	--	--	--	--	--	--	--	--	--	--
NOV											
27...	--	--	--	--	--	--	--	--	--	--	--
DEC											
18...	--	--	--	--	--	--	--	--	--	--	--
JAN											
23...	0	2	2	520	20	4	4	140	120	<.1	<.1
FEB											
19...	--	--	--	--	--	--	--	--	--	--	--
MAR											
27...	2	7	3	1800	20	6	5	80	20	<.1	<.1
APR											
30...	--	--	--	--	--	--	--	--	--	--	--
MAY											
21...	--	--	--	--	--	--	--	--	--	--	--
JUN											
19...	0	12	4	670	20	16	5	120	90	<.1	<.1
JUL											
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
06...	0	14	4	580	10	4	4	70	40	<.1	<.1
SEP											
04...	--	--	--	--	--	--	--	--	--	--	--

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT											
23...	--	--	--	--	--	--	--	--	5.0	--	--
NOV											
27...	--	--	--	--	0	--	--	--	4.4	--	--
DEC											
18...	--	--	--	--	--	--	--	--	2.8	--	--
JAN											
23...	5	0	0	0	0	0	120	70	--	3.4	.7
FEB											
19...	--	--	--	--	0	--	--	--	.6	--	--
MAR											
27...	5	3	0	0	0	0	20	1	--	--	1.2
APR											
30...	--	--	--	--	--	--	--	--	7.4	--	--
MAY											
21...	--	--	--	--	0	--	--	--	1.9	--	--
JUN											
19...	2	1	0	0	0	0	20	3	--	--	1.4
JUL											
16...	--	--	--	--	0	--	--	--	3.2	--	--
AUG											
06...	2	0	0	0	0	0	60	10	--	3.2	--
SEP											
04...	--	--	--	--	--	--	--	--	3.9	--	--

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)
NOV					
27...	0815	7.0	1.0	475	8.0
27...	0820	17	1.0	460	8.0
27...	0825	27	2.0	470	8.0
27...	0830	37	2.0	475	8.0
27...	0835	47	2.0	475	8.5
27...	0840	57	1.0	470	8.0
MAR					
27...	1005	7.0	1.0	350	4.0
27...	1010	17	1.0	360	4.0
27...	1015	27	1.0	365	4.0
27...	1020	37	1.0	350	4.0
MAR					
27...	1025	47	1.0	350	4.0
27...	1030	57	1.0	355	4.0
AUG					
06...	1310	5.0	1.0	440	27.0
06...	1315	15	1.0	445	27.0
06...	1320	25	1.0	445	27.0
06...	1325	35	1.0	440	27.0
06...	1330	45	1.0	440	27.0
06...	1335	55	1.0	445	27.5

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT³/S)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT³/S)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 23...	1100	155	13	5.4	APR 30...	0800	291	25	20
NOV 27...	0900	240	15	9.7	MAY 21...	0900	99	3	.80
DEC 18...	0800	77	11	2.3	JUN 19...	1000	52	15	2.1
JAN 23...	0900	142	8	3.1	JUL 16...	1300	34	17	1.6
FEB 19...	1000	63	5	.85	AUG 06...	1400	35	9	.85
MAR 27...	1000	590	76	121	SEP 04...	1400	64	29	5.0

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA OCTOBER 1979 TO SEPTEMBER 1980

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m²) Dry weight	Biomass (g/m²) Ash weight	Chlorophyll a (mg/m²)	Chlorophyll b (mg/m²)	Sampling method
Oct. 23 to Nov. 27	35	4.41	5.04	6.13	.420	Polyethylene strip
May 21 to June 19	29	17.5	17.2	3.68	1.88	Polyethylene strip
June 19 to July 16	27	--	--	14.3	4.87	Polyethylene strip
July 16 to Aug. 6	21	14.8	12.4	20.8	2.86	Polyethylene strip
Aug. 6 to Sept. 4	29	31.9	28.7	6.50	3.88	Polyethylene strip

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	NOV 27,79		MAR 27,80		MAY 21,80		JUN 19,80	
TIME	0900		1000		0900		1000	
TOTAL CELLS/ML	390		130		420		370	
DIVERSITY: DIVISION	0.8		1.1		1.0		1.2	
.CLASS	0.8		1.1		1.0		1.2	
..ORDER	1.2		1.6		1.8		1.9	
...FAMILY	2.8		3.0		2.7		2.6	
....GENUS	2.9		3.0		2.7		2.6	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	10	8	--	-	26	7
....KIRCHNERIELLA	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	13	3	--	-
...SCENEDESMACEAE								
....ACTINASTRUM	20	5	--	-	--	-	--	-
....SCENEDESMUS	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	5	1	20#	15	26	6	39	11
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	35	9	5	4	120#	28	52	14
..PENNALES								
...ACHNANTHACEAE								
....COCCONEIS	5	1	5	4	13	3	--	-
....RHOICOSPHENIA	5	1	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	51	13	--	-	--	-	13	4
...DIATOMACEAE								
....DIATOMA	5	1	--	-	--	-	--	-
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	--	-
....SYNEDRA	5	1	10	8	39	9	39	11
...GOMPHONEMATACEAE								
....GOMPHONEMA	20	5	15	12	--	-	--	-
...NAVICULACEAE								
....NAVICULA	120#	31	40#	31	52	13	--	-
...NITZSCHIACEAE								
....NITZSCHIA	81#	21	10	8	120#	28	160#	43
...SURIRELLACEAE								
....SURIRELLA	--	-	5	4	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	-	--	-	--	-	13	4
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	26	6	13	4
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	--	-	13	3	--	-
..HORMOGONALES								
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	--	-	--	-
....SCHIZOTHRIX	35	9	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	13	4
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..GYMNODINIALES								
...GYMNODINIACEAE								
....GYMNODINIUM	--	-	10	8	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	JUL 16,80	AUG 6,80	SEP 4,80
TIME	1300	1400	1400
TOTAL CELLS/ML	720	1200	750
DIVERSITY: DIVISION	1.8	1.8	1.3
.CLASS	1.8	1.8	1.3
..ORDER	2.4	2.4	1.8
...FAMILY	2.4	2.8	2.4
....GENUS	2.4	3.0	2.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...OOCYSTACEAE						
....ANKISTRODESMUS	--	-	91	8	90	12
....KIRCHNERIELLA	78	11	--	-	--	-
....OOCYSTIS	--	-	--	-	13	2
....SELENASTRUM	--	-	--	-	--	-
...SCENEDESMACEAE						
....ACTINASTRUM	--	-	--	-	--	-
....SCENEDESMUS	--	-	340#	29	310#	41
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	170#	23	140	12	52	7
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	170#	23	65	6	39	5
..PENNALES						
...ACHNANTHACEAE						
....COCCONEIS	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	--	-	--	-
...DIATOMACEAE						
....DIATOMA	--	-	--	-	--	-
...FRAGILARIACEAE						
....FRAGILARIA	--	-	26	2	--	-
....SYNEDRA	--	-	--	-	--	-
...GOMPHONEMATACEAE						
....GOMPHONEMA	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	26	4	13	1	13	2
...NITZSCHIACEAE						
....NITZSCHIA	13	2	210#	18	170#	22
...SURIRELLACEAE						
....SURIRELLA	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOCHRYSIDACEAE						
....CHROOMONAS	--	-	13	1	--	-
...CRYPTOMONADACEAE						
....CRYPTOMONAS	13	2	--	-	26	3
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....AGMENELLUM	--	-	100	9	--	-
....ANACYSTIS	--	-	52	4	--	-
..HORMOGONALES						
...OSCILLATORIACEAE						
....LYNGBYA	230#	32	--	-	--	-
....SCHIZOTHRIX	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....EUGLENA	--	-	78	7	26	3
....TRACHELOMONAS	26	4	39	3	13	2
PYRRHOPHYTA (FIRE ALGAE)						
.DINOPHYCEAE						
..GYMNODINIALES						
...GYMNODINIACEAE						
....GYMNODINIUM	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	592	482	395	410	470	500	275	370	471	380	500	500
2	597	504	420	418	480	505	305	390	461	420	498	495
3	579	505	420	420	490	510	320	405	490	470	498	390
4	580	499	430	425	480	520	340	410	485	490	500	402
5	410	497	435	465	485	520	320	430	495	500	488	430
6	615	510	450	500	480	510	335	550	499	545	420	430
7	442	560	350	520	485	520	350	435	500	330	438	395
8	420	512	362	500	485	490	370	445	524	375	402	450
9	480	439	355	495	485	480	380	445	389	428	360	460
10	462	472	440	495	490	520	365	460	430	467	400	500
11	438	360	425	485	490	380	370	460	448	482	425	480
12	467	412	420	380	490	350	380	470	460	500	455	490
13	440	427	365	304	490	380	395	460	468	507	462	480
14	349	470	370	375	495	440	380	460	483	510	450	460
15	384	472	410	390	500	435	380	395	500	518	478	300
16	444	458	440	380	490	450	330	395	557	520	465	305
17	421	447	460	388	490	490	350	410	522	490	470	440
18	460	463	465	368	490	300	370	420	435	495	470	300
19	480	444	495	375	490	270	380	440	462	505	480	400
20	494	478	470	405	505	300	395	415	483	495	478	410
21	386	481	460	420	500	270	620	415	500	500	475	405
22	442	485	460	455	515	260	410	428	385	505	480	440
23	518	502	460	470	510	270	420	448	438	505	495	450
24	500	491	358	470	380	325	430	440	600	490	498	440
25	444	490	348	500	385	350	435	453	730	418	502	430
26	445	463	272	530	420	310	440	468	680	418	508	420
27	476	458	290	490	460	340	440	462	320	420	510	420
28	502	420	340	480	465	305	440	478	315	450	520	450
29	498	440	380	470	480	290	350	479	380	460	510	430
30	459	400	392	470	---	285	425	480	395	480	502	430
31	468	---	395	480	---	300	---	440	---	480	460	---
MEAN	474	468	404	444	478	393	383	441	477	469	471	428

WTR YR 1980 MEAN 444 MAX 730 MIN 260

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMER 1980

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.5	7.0	.0	2.0	.0	.0	3.0	11.5	18.0	19.0	24.0	23.0
2	14.5	9.0	.0	2.0	.0	.0	6.0	12.5	18.0	20.0	23.0	23.0
3	14.0	9.0	.0	1.0	.0	.0	5.0	14.0	18.0	19.0	23.0	23.0
4	16.0	8.0	.0	.0	.0	.0	7.0	15.0	17.0	19.0	23.0	22.0
5	15.0	7.0	1.0	.0	.0	.5	6.0	16.0	16.0	20.0	24.0	23.0
6	13.0	7.0	2.0	.0	.0	.0	8.0	15.0	16.0	20.0	25.0	23.0
7	11.0	7.0	3.0	.0	.0	.0	8.0	16.0	17.5	20.0	24.0	23.0
8	9.0	7.0	3.0	.0	.0	.0	10.0	14.0	17.0	20.0	25.0	21.0
9	8.0	6.0	1.0	.0	.0	.0	11.5	13.0	15.0	20.0	25.0	21.5
10	7.0	7.0	1.0	.0	.0	.0	11.0	11.5	15.0	21.0	26.0	21.0
11	6.5	7.0	3.0	.0	.0	.0	8.0	12.5	11.0	22.0	25.0	20.0
12	7.0	6.0	6.0	.0	.0	.0	8.0	14.0	11.0	21.0	24.5	18.0
13	7.0	4.0	5.0	.0	.0	.0	9.0	15.0	14.0	21.0	24.0	19.0
14	6.5	4.0	2.0	.0	.0	.0	8.0	14.0	16.0	21.0	23.0	19.0
15	6.0	3.0	2.0	.0	.0	.0	7.0	14.0	20.0	22.0	23.0	18.0
16	7.0	3.0	1.0	.0	.0	.0	6.0	15.0	19.0	22.5	23.0	15.5
17	8.0	3.0	.0	.0	.0	2.0	4.0	16.0	17.0	23.0	24.0	17.0
18	9.0	6.0	.0	1.0	.0	1.0	6.0	16.5	18.0	25.0	23.0	16.0
19	10.0	4.0	.0	2.0	.0	.0	8.0	16.0	18.0	27.0	21.0	18.0
20	12.0	8.0	.0	1.5	.0	2.0	10.0	16.0	17.0	26.0	22.0	19.0
21	15.0	8.0	.0	.0	.0	4.0	12.0	16.0	15.0	27.0	23.0	21.0
22	16.0	10.0	.0	.0	.0	1.0	13.0	16.0	15.0	25.0	24.0	21.0
23	16.0	10.0	.0	.0	.0	1.0	12.0	19.0	17.0	24.0	22.0	21.0
24	15.0	10.0	2.0	.0	1.0	2.0	11.0	21.0	23.0	22.0	21.0	18.0
25	9.0	10.0	5.0	.0	.0	3.0	12.0	20.0	25.0	22.0	21.0	18.0
26	7.0	11.0	2.0	.0	.0	1.0	12.0	18.0	22.0	22.5	22.0	15.5
27	6.0	9.0	1.0	.0	.0	3.0	11.0	18.0	18.0	24.0	22.0	13.5
28	6.0	8.0	1.0	.0	.0	5.0	11.0	17.0	20.0	23.0	24.0	13.0
29	7.0	5.0	2.0	.0	.0	6.0	10.0	16.0	18.0	22.0	24.0	15.0
30	7.0	2.0	2.0	.0	---	7.0	11.0	18.0	18.0	22.0	24.0	15.0
31	6.0	---	2.0	.0	---	6.0	---	18.0	---	22.5	24.0	---
MEAN	10.0	7.0	1.5	.5	.0	1.5	9.0	15.5	17.5	22.0	23.5	19.0

WTR YR 1980 MEAN 10.5 MAX 27.0 MIN .0

04217500 TONAWANDA CREEK NEAR ALABAMA, NY

LOCATION.--Lat 43°05'28", long 78°27'15", Genesee County, Hydrologic Unit 04120104, on right bank 15 ft (5 m) downstream from bridge on Meadville Road, 0.4 mi (0.6 km) downstream from inoperable canal feeder connecting Tonawanda and Oak Orchard Creeks, 1.1 mi (1.8 km) upstream from small tributary, and 3.2 mi (5.1 km) west of Alabama.

DRAINAGE AREA.--231 mi^2 (598 km^2).

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1974: 1973. WDR NY-75-1: 1959 (P).

GAGE.--Water-stage recorder. Datum of gage is 605.93 ft (184.687 m) National Geodetic Vertical Datum of 1929. Prior to October 1965, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--25 years, 282 ft^3/s (7.986 m^3/s), 16.58 in/yr (421 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,980 ft^3/s (226 m^3/s) Mar. 31, 1960, gage height, 14.28 ft (4.353 m); maximum gage height, 15.95 ft (4.862 m) Jan. 23, 1959 (ice jam); minimum daily, 7.7 ft^3/s (0.22 m^3/s) Sept. 14, 15, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,100 ft^3/s (59.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 26	2300	*3,120	88.4	*12.21	3.722	Mar. 19	0530	2,500	70.8	11.15	3.399

Minimum discharge, 20 ft^3/s (0.57 m^3/s) Aug. 30, 31, gage height, 5.11 ft (1.558 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	140	229	330	110	160	1270	291	126	296	41	25
2	56	130	227	270	110	150	1120	228	110	183	35	51
3	54	128	242	240	100	150	725	190	116	152	70	131
4	54	130	199	210	100	140	600	166	104	124	90	139
5	57	117	206	190	100	140	667	143	97	98	88	70
6	132	110	390	170	98	150	556	128	79	159	71	49
7	284	116	612	150	98	160	430	117	69	225	86	39
8	175	176	554	140	96	170	352	110	235	117	77	34
9	199	220	526	130	94	180	334	104	517	91	52	32
10	247	338	306	120	92	228	417	99	274	82	46	38
11	211	825	257	170	90	588	346	94	192	72	42	36
12	170	500	304	598	88	921	310	92	145	63	37	37
13	274	315	357	868	88	722	331	102	110	57	35	31
14	638	253	292	577	86	501	368	141	91	50	35	32
15	460	242	211	420	86	420	513	190	80	49	32	269
16	288	231	176	360	86	355	576	155	86	50	34	236
17	236	244	169	320	84	502	400	123	128	48	35	106
18	184	203	160	380	84	1670	313	136	96	45	32	74
19	169	210	150	310	84	2140	271	160	76	39	30	75
20	186	176	160	240	82	1340	238	164	92	37	27	59
21	515	158	170	200	90	1360	209	130	263	37	26	47
22	325	147	170	170	100	1780	190	110	325	44	26	43
23	215	145	201	150	140	1640	170	102	168	47	24	47
24	192	148	592	140	290	1130	155	91	112	81	22	55
25	261	150	1180	140	260	1140	147	80	88	55	22	62
26	233	173	2530	130	190	1290	140	72	75	43	25	50
27	180	214	2090	130	170	933	136	65	86	36	24	45
28	159	218	879	120	160	959	153	62	92	59	22	52
29	198	221	544	120	160	1040	368	60	346	61	22	43
30	204	248	460	120	---	1140	403	58	358	59	21	37
31	163	---	400	110	---	1160	---	69	---	49	20	---
TOTAL	6779	6626	14943	7723	3416	24359	12208	3832	4736	2608	1249	2044
MEAN	219	221	482	249	118	786	407	124	158	84.1	40.3	68.1
MAX	638	825	2530	868	290	2140	1270	291	517	296	90	269
MIN	54	110	150	110	82	140	136	58	69	36	20	25
CFSM	.95	.96	2.09	1.08	.51	3.40	1.76	.54	.68	.36	.17	.30
IN.	1.09	1.07	2.41	1.24	.55	3.92	1.97	.62	.76	.42	.20	.33

CAL YR 1979 TOTAL 128163 MEAN 351 MAX 3900 MIN 20 CFSM 1.52 IN 20.64
WTR YR 1980 TOTAL 90523 MEAN 247 MAX 2530 MIN 20 CFSM 1.07 IN 14.58

04218000 TONAWANDA CREEK AT RAPIDS, NY

LOCATION.--Lat 43°05'35", long 78°38'11", Niagara County, Hydrologic Unit 04120104, on right bank at downstream side of bridge on Rapids Road at Rapids, 4.6 mi (7.4 km) east of Pendleton, 4.9 mi (7.9 km) downstream from Beeman Creek, and 5.9 mi (9.5 km) upstream from Mud Creek.

DRAINAGE AREA.--351 mi^2 (909 km^2), includes 0.76 mi^2 (1.97 km^2) in Mud Creek from which flow is diverted into Black Creek.

PERIOD OF RECORD.--August 1955 to September 1965, March 1978 to September 1979 (seasonal gage-height records only), October 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 571.19 ft (174.099 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--11 years (1955-65, 1980) 358 ft^3/s (10.14 m^3/s), 13.85 in/yr (352 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,280 ft^3/s (178 m^3/s) Apr. 1, 1960, gage height, 16.96 ft (5.169 m); minimum daily, 6.8 ft^3/s (0.19 m^3/s) Sept. 29, 30, 1965; minimum gage height, 1.13 ft (0.344 m) Sept. 11, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft^3/s (68.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 28	0530	*3,220	9.12	*11.23	3.423	Mar. 23	2330	2,530	71.6	9.28	2.829

Minimum discharge, 26 ft^3/s (0.74 m^3/s) Aug. 30, 31, Sept. 1, gage height, 1.24 ft (0.378 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	270	358	623	150	250	1890	546	84	408	87	28
2	62	242	342	521	140	190	1880	431	134	339	75	54
3	58	218	333	459	140	150	1730	352	134	245	75	120
4	52	208	333	389	130	140	1320	298	142	202	163	218
5	56	205	333	350	130	140	1170	267	134	166	196	221
6	87	193	405	310	120	148	1090	239	120	131	172	148
7	199	190	683	280	120	163	890	218	99	211	142	97
8	295	208	976	260	120	190	686	199	99	236	154	71
9	251	292	969	250	110	199	596	190	355	145	134	58
10	264	521	812	230	110	227	633	178	572	112	94	52
11	295	821	562	240	110	468	695	169	456	99	80	56
12	263	1050	465	534	100	680	607	169	339	87	73	52
13	302	840	506	787	100	831	610	175	254	75	66	52
14	456	585	521	934	100	784	627	214	193	66	58	50
15	708	468	441	881	100	673	852	263	148	60	60	54
16	641	437	355	708	100	377	969	295	126	58	54	295
17	472	421	300	588	100	412	887	257	131	60	52	267
18	382	405	260	623	100	976	648	239	169	58	56	148
19	315	370	210	676	100	1550	502	276	134	54	54	104
20	339	349	220	607	100	2240	428	295	117	48	48	99
21	448	311	210	456	110	2350	373	279	199	45	43	82
22	624	286	200	350	120	2460	330	233	389	56	38	66
23	492	282	305	300	180	2480	295	199	402	73	38	62
24	384	286	537	260	298	2430	263	172	292	73	34	64
25	358	298	1230	230	415	2190	239	145	199	102	31	75
26	377	330	2120	200	360	2130	227	123	139	77	29	84
27	342	364	2770	190	250	2190	214	104	107	62	31	71
28	295	370	3050	180	260	1910	221	87	115	58	31	62
29	270	358	2030	170	270	1800	336	75	142	92	29	69
30	295	355	1140	160	---	1860	553	69	386	112	28	58
31	302	---	784	150	---	1880	---	62	---	104	26	---
TOTAL	9746	11533	23760	12896	4543	34468	21761	6818	6310	3714	2251	2937
MEAN	314	384	766	416	157	1112	725	220	210	120	72.6	97.9
MAX	708	1050	3050	934	415	2480	1890	546	572	408	196	295
MIN	52	190	200	150	100	140	214	62	84	45	26	28
CFSM	.90	1.09	2.18	1.19	.45	3.17	2.07	.63	.60	.34	.21	.28
IN.	1.03	1.22	2.52	1.37	.48	3.65	2.31	.72	.67	.39	.24	.31

WTR YR 1980 TOTAL 140737 MEAN 385 MAX 3050 MIN 26 CFSM 1.10 IN 14.92

04218518 ELLICOTT CREEK BELOW WILLIAMSVILLE, NY

LOCATION.--Lat 42°58'40", long 78°45'50", Erie County, Hydrologic Unit 04120104, on right bank 15 ft (5 m) upstream from bridge on State Highway 324 (Sheridan Drive), 0.8 mi (1.3 km) upstream from sewage treatment plant, and 1.4 mi (2.3 km) northwest of Williamsville.

DRAINAGE AREA.--77.6 mi^2 (201 km^2).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 586.41 ft (178.738 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods and those for periods of no gage-height record, Feb. 22 to Apr. 8 and June 19 to July 15, which are poor. Regulation by intermittent pumping from stone quarry into stream upstream from station. Records at medium and high flows may be comparable with those obtained at station 04218500 between October 1955 and September 1972.

AVERAGE DISCHARGE.--8 years, 137 ft^3/s (3.880 m^3/s), 23.98 in/yr (609 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,550 ft^3/s (72.2 m^3/s) Mar. 5, 1979, gage height 9.16 ft (2.792 m); maximum gage height, 9.23 ft (2.813 m) Sept. 26, 1977; no flow for part of July 27, 1976, gage height, 0.73 ft (0.222 m), result of pipeline construction.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 26	1815	*1,380	39.1	*6.19	1.887	Mar. 22	unknown	1,100	31.2	5.46	1.664

Minimum discharge, 6.0 ft^3/s (0.17 m^3/s) Aug. 27, gage height 1.02 ft (0.311 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	60	80	120	56	64	210	126	42	130	31	53
2	44	57	91	109	54	60	120	105	82	90	25	138
3	46	54	102	96	52	56	110	90	88	82	312	262
4	48	53	124	80	52	56	310	80	82	60	424	166
5	65	51	166	72	50	60	270	74	77	50	151	55
6	71	51	370	66	48	70	140	70	64	150	108	40
7	97	67	795	62	47	80	80	67	64	90	91	29
8	81	109	703	64	45	72	60	63	372	64	69	25
9	78	212	442	70	44	90	114	63	589	50	52	23
10	82	432	221	80	43	140	167	64	214	43	50	22
11	85	645	205	135	42	400	210	64	100	36	47	20
12	108	318	274	275	41	190	172	65	68	32	44	19
13	253	158	281	369	40	140	189	78	46	28	37	20
14	347	142	193	179	39	120	221	84	36	25	35	63
15	228	136	131	131	38	100	330	93	31	21	34	49
16	133	136	106	112	37	90	340	84	34	18	31	52
17	99	138	92	136	36	310	216	74	37	25	30	45
18	84	114	84	191	35	500	146	114	40	21	30	31
19	77	99	78	184	35	180	122	125	38	17	23	29
20	114	89	72	132	34	350	105	115	48	16	21	26
21	175	81	68	96	43	800	94	93	210	18	17	23
22	144	80	74	89	70	400	67	80	120	67	19	26
23	102	83	132	80	200	170	74	68	66	36	13	43
24	106	101	362	76	88	450	70	54	50	26	12	42
25	125	106	744	72	82	500	67	49	39	25	18	39
26	109	144	1260	68	72	170	71	45	36	21	15	52
27	85	142	743	66	64	150	71	42	43	24	7.3	39
28	78	120	286	64	66	190	87	42	48	44	22	36
29	76	104	187	62	70	210	164	40	250	70	15	31
30	76	99	158	60	---	230	188	37	200	70	12	28
31	68	---	139	58	---	500	---	37	---	45	12	---
TOTAL	3330	4181	8763	3454	1624	6898	4585	2285	3214	1494	1807.3	1526
MEAN	107	139	283	111	56.0	223	153	73.7	107	48.2	58.3	50.9
MAX	347	645	1260	369	200	800	340	126	589	150	424	262
MIN	44	51	68	58	34	56	60	37	31	16	7.3	19
CFSM	1.38	1.79	3.65	1.43	.72	2.87	1.97	.95	1.38	.62	.75	.66
IN.	1.60	2.00	4.20	1.66	.78	3.31	2.20	1.10	1.54	.72	.87	.73

CAL YR 1979 TOTAL 58238.7 MEAN 160 MAX 1950 MIN 6.0 CFSM 2.06 IN 27.92
WTR YR 1980 TOTAL 43161.3 MEAN 118 MAX 1260 MIN 7.3 CFSM 1.52 IN 20.69

04219000 ERIE (BARGE) CANAL AT LOCK 30, MACEDON, NY

LOCATION.--Lat 43°04'20", long 77°17'45", Wayne County, Hydrologic Unit 04140201, on left bank in Macedon, 500 ft (152 m) downstream from headgate in old Erie Canal, 700 ft (213 m) downstream from bridge on State Highway 350, 0.2 mi (0.3 km) downstream from Lock 30, and 2.6 mi (4.2 km) upstream from Ganargua Creek.

PERIOD OF RECORD.--November 1919 to December 1920, October 1977 to current year (navigation seasons only), October 1950 to September 1977. Prior to October 1956, published as "Barge Canal at Lock 30, Macedon."

REVISED RECORDS.--WSP 1237: 1951

GAGE.--Water-stage recorder. Datum of gage is 447.58 ft (136.422 m) National Geodetic Vertical Datum of 1929. Nov. 1, 1919 to Dec. 28, 1920, nonrecording gage at same site at different datum.

REMARKS.--Records good except those for non-navigation season, which are poor. This record represents net diversion from Niagara River basin into Oswego River basin through Erie (Barge) Canal. During the non-navigation period, when the pool upstream from Lock 30 is drained, discharge consists of leakage through guard gates, runoff from small areas tributary to canal upstream from station, or diversion for use downstream in the Canal system.

COOPERATION.--Records of gate openings, lockages, lock-valve openings, and elevations of water surface in Erie (Barge) Canal upstream and downstream from Lock 30 furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--27 years (1950-77), 200 ft^3/s (5.664 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 874 ft^3/s (24.8 m^3/s) Dec. 3, 1969; minimum daily, 0.8 ft^3/s (0.023 m^3/s) Feb. 25, 26, 1962.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	229	213	88				59	4.6	114	360	334	334
2	229	210	71				52	4.5	121	351	338	329
3	221	210	71				37	5.9	109	341	338	326
4	218	213	70				31	6.6	104	366	338	332
5	221	210	71				31	62	109	354	341	329
6	226	210	71				31	13	110	370	341	329
7	232	207	71				28	10	113	348	332	335
8	221	210	23				28	47	216	343	344	326
9	223	210	23				28	78	260	347	348	329
10	223	207	23				38	90	147	342	351	323
11	238	213	23				38	90	101	360	339	323
12	226	207	23				36	28	101	350	339	338
13	226	207	23				32	45	103	342	345	328
14	221	207	23				28	70	116	361	339	319
15	218	205	23				39	48	98	341	351	322
16	227	210	23				47	44	107	341	352	319
17	221	207	23				37	58	96	353	364	313
18	218	210	23				28	59	108	336	361	313
19	220	210	23				28	57	96	347	360	319
20	230	205	23				28	70	97	342	352	325
21	224	211	23				28	67	100	342	349	319
22	221	205	23				25	55	105	325	353	322
23	218	205	24				25	62	96	321	359	316
24	215	202	24				25	82	99	317	351	325
25	210	205	26				25	75	105	337	348	316
26	213	226	24				4.7	60	270	326	349	325
27	210	257	24				4.6	47	357	337	348	316
28	213	257	24				6.7	96	351	325	355	325
29	219	205	24				5.0	115	367	318	360	319
30	210	125	24				4.7	115	357	320	358	322
31	210	---	24				---	115	--	331	366	---
TOTAL	6851	6279	1076				857.7	1779.6	4633	10594	10803	9716
MEAN	221	209	34.7				28.6	57.4	154	342	348	324
MAX	238	257	88				59	115	367	370	366	338
MIN	210	125	23				4.6	4.5	96	317	332	313

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY
(National stream-quality accounting network station)

LOCATION.--Lat 43°15'40", long 79°03'47", Niagara County, Hydrologic Unit 04120104, specific-conductance and water-temperature recorder on U.S. Coast Guard wharf at Old Fort Niagara, at mouth of Niagara River, and 1.0 mi (1.6 km) northwest of Youngstown. Water samples collected about 2 mi (3 km) upstream from U.S. Coast Guard wharf.

DRAINAGE AREA.--265,000 mi^2 (686,350 km^2).

PERIOD OF RECORD.--Water years 1971 to current year.
CHEMICAL DATA: 1971 (a), 1973-74 (b), 1975-80 (c).
MINOR ELEMENT DATA: 1971 (a), 1972-80 (b).
ORGANIC DATA: OC--1973 (a), 1974-75 (b), 1978-80 (c).
NUTRIENT DATA: 1971 (a), 1973-74 (b), 1975-80 (c).
BIOLOGICAL DATA:
Bacteria--1973 (b), 1974 (d), 1975-80 (c).
Phytoplankton--1973 (b), 1974 (d), 1975-77 (c), 1978-80 (c).
Periphyton--1974 (a), 1975-80 (b).
SEDIMENT DATA: 1975-77 (c), 1978 (b), 1979-80 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1973 to June 1980 (discontinued).
WATER TEMPERATURES: September 1973 to June 1980 (discontinued).

INSTRUMENTATION.--Water-quality monitor September 1973 to June 1980.

REMARKS.--Published in 1971 as "at Youngstown'. Discharge is the daily mean reported for Niagara River at Buffalo (station 04216000). Interruptions in the record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water year 1978): Maximum recorded, 333 micromhos March 15, 16, 1978; minimum recorded, 205 micromhos Jan. 9, 1978.
WATER TEMPERATURES: Maximum recorded (water years 1977-78), 25.5°C July 20-22, 1977; minimum (water years 1976-79), freezing point on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV											
01...	1400	222000	300	7.7	11.5	1.0	9.8	89	490	58	120
MAY											
08...	1000	248000	295	8.0	7.0	2.5	11.2	95	K96	53	120
JUN											
03...	1400	243000	285	7.8	13.5	.35	10.0	96	65	K9	120
24...	1400	240000	300	8.0	16.5	2.3	8.0	82	--	<1	120
JUL											
15...	1400	237000	297	7.9	21.0	2.0	8.6	98	K620	22	120
AUG											
05...	1400	242000	300	7.8	27.0	1.1	8.1	101	K79	K2	--
SEP											
03...	1400	240000	310	7.9	23.0	.30	9.2	106	70	K5	130

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV											
01...	24	36	8.2	13	1.4	100	19	20	.1	.2	169
MAY											
08...	29	34	7.9	11	1.2	88	26	19	.1	.1	169
JUN											
03...	30	35	8.0	11	1.1	90	25	18	.2	.0	187
24...	37	36	8.2	11	1.5	87	23	20	.1	.2	169
JUL											
15...	30	35	7.9	10	1.5	90	26	20	.1	.2	192
AUG											
05...	--	--	--	9.9	1.5	94	26	18	.2	.4	194
SEP											
03...	47	39	8.7	10	1.4	86	24	21	.1	.3	172

K Results based on colony count outside the acceptable range (non-ideal colony count).

04219640 - NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)
NOV 01...	159	.14	.11	.01	.00	.63	.25	.64	.25	.78	.36
MAY 08...	153	--	.24	.04	.06	.12	.02	.16	.08	--	.32
JUN 03...	154	.42	.42	.05	.07	.75	.30	.80	.37	1.2	.79
24...	154	.28	.28	.08	.05	.34	.22	.42	.27	.70	.55
JUL 15...	157	.38	.39	.06	.03	.29	.37	.35	.40	.73	.79
AUG 05...	--	.35	.27	.23	.02	.13	.20	.36	.22	.71	.49
SEP 03...	157	.21	.23	.04	.00	.22	.33	.26	.33	.47	.56

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
NOV 01...	.04	.00	--	--	--	--	--	--	--	--	--
MAY 08...	.02	.01	--	--	--	--	--	--	--	--	--
JUN 03...	.02	.01	1	2	50	30	25	2	<10	<10	0
24...	.02	.01	--	--	--	--	--	--	--	--	--
JUL 15...	.03	.01	2	1	<50	30	0	3	10	<10	--
AUG 05...	.02	.01	--	--	--	--	--	--	--	--	--
SEP 03...	.02	.01	1	1	<50	0	35	3	10	<10	0

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
NOV 01...	--	--	--	--	--	--	--	--	--	--	--
MAY 08...	--	--	--	--	--	--	--	--	--	--	--
JUN 03...	0	8	4	170	0	11	11	10	3	<.1	<.1
24...	--	--	--	--	--	--	--	--	--	--	--
JUL 15...	0	13	5	240	10	10	2	10	1	.1	<.1
AUG 05...	--	--	--	--	--	--	--	--	--	--	--
SEP 03...	0	10	3	100	10	7	0	10	0	<.1	<.1

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
NOV 01...	--	--	--	--	--	--	--	--	1.8	--	--
MAY 08...	--	--	--	--	0	--	--	--	6.0	--	--
JUN 03...	3	0	0	0	0	0	30	0	--	12	1.3
24...	--	--	--	--	1	--	--	--	3.8	--	--
JUL 15...	0	0	0	0	0	--	20	10	--	.4	.5
AUG 05...	--	--	--	--	0	--	--	--	1.5	--	--
SEP 03...	3	0	0	0	0	0	20	30	--	4.4	1.1

04219640 - NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)
NOV					
01...	1315	200	3.0	305	11.5
01...	1320	200	10	300	11.5
01...	1325	200	20	300	11.5
01...	1330	200	30	300	11.5
01...	1335	800	3.0	295	11.5
01...	1340	800	10	295	11.5
01...	1345	800	30	300	11.5
01...	1350	800	50	300	11.5
01...	1410	1400	3.0	300	11.5
01...	1415	1400	10	305	11.5
01...	1420	1400	15	305	11.5
01...	1425	1400	20	305	11.5
MAY					
08...	0810	200	3.0	295	7.0
08...	0815	200	10	294	7.0
08...	0820	200	21	294	7.0
08...	0825	200	33	291	7.0
08...	0840	800	3.0	296	7.0
08...	0845	800	10	295	7.0
08...	0850	800	30	293	7.0
08...	0855	800	50	292	7.0
08...	0920	1400	3.0	295	7.0
08...	0925	1400	10	294	7.0
08...	0930	1400	23	292	7.0
08...	0935	1400	36	290	7.0
JUN					
03...	1300	200	3.0	288	13.5
03...	1305	200	10	287	13.5
03...	1310	200	3.0	300	16.5
03...	1315	200	10	300	16.5
03...	1320	200	25	298	16.0
03...	1325	200	40	300	16.0
03...	1330	200	3.0	290	16.0
03...	1335	200	10	290	21.0
03...	1340	200	20	290	16.0
JUN					
03...	1345	200	30	290	16.0
03...	1350	800	3.0	300	21.0
03...	1355	800	10	300	21.0
03...	1400	800	30	285	13.5
03...	1405	800	50	300	21.0
03...	1410	1400	3.0	300	21.0
03...	1415	1400	10	300	21.0
03...	1420	1400	20	300	21.0
03...	1425	1400	30	300	16.0
03...	1430	1400	30	300	16.0
AUG					
05...	1200	200	3.0	290	23.0
05...	1205	200	10	290	23.0
05...	1210	200	20	290	23.0
05...	1215	200	35	290	23.0
05...	1230	800	3.0	290	23.0
05...	1235	800	10	290	23.0
05...	1240	800	30	290	23.0
05...	1245	800	50	300	23.0
05...	1300	1400	3.0	290	23.5
05...	1305	1400	10	290	23.0
05...	1310	1400	20	290	23.0
05...	1315	1400	35	290	23.0
SEP					
03...	1305	200	3.0	310	23.0
03...	1310	200	10	310	23.0
03...	1315	200	22	308	23.0
03...	1320	200	35	306	23.0
03...	1325	800	3.0	311	23.0
03...	1330	800	10	310	23.0
03...	1335	800	25	310	23.0
03...	1340	800	40	309	23.0
03...	1405	1400	3.0	313	23.0
03...	1410	1400	10	312	23.0
03...	1415	1400	20	311	23.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW (FT^3/S)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
NOV				
01...	1400	222000	7	4200
MAY				
08...	1000	248000	12	8040
JUN				
03...	1400	243000	0	0
24...	1400	240000	7	4540
AUG				
05...	1400	242000	2	1310
SEP				
03...	1400	240000	3	1940

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1979 TO SEPTEMBER 1980

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2)		Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
		Dry weight	Ash weight			
May 8 to June 4	27	.787	.236	.230	.060	Polyethylene strip
June 24 to July 15	21	.394	.551	.620	.280	Polyethylene strip
July 15 to Aug. 5	21	24.9	21.8	18.0	2.29	Polyethylene strip
Aug. 5 to Sept. 3	29	8.03	7.95	66.6	1.67	Polyethylene strip

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, AUGUST 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	SEP 10,79	MAY 8,80	JUN 3,80	JUN 24,80
TIME	1400	1000	1400	1400
TOTAL CELLS/ML	1300	1100	330	700
DIVERSITY: DIVISION	0.9	1.9	1.2	1.7
.CLASS	0.9	2.0	1.2	1.7
..ORDER	1.5	2.7	1.4	1.8
...FAMILY	2.5	2.8	2.0	2.0
....GENUS	2.6	3.1	2.3	2.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	--	-
...COELASTRACEAE								
....COELASTRUM	120	10	--	-	--	-	--	-
...HYDRODICTYACEAE								
....PEDIASTRUM	190#	15	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	10	1	55	5	120#	35	--	-
....CHLORELLA	470#	38	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	110	10	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	--	-	55	5	87#	26	--	-
....TETRASTRUM	--	-	--	-	--	-	52	7
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	110	10	--	-	--	-
..ULOTRICHALES								
...ULOTRICHACEAE								
....BINUCLEARIA	160	13	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	69	6	--	-	--	-
....PLATYMONAS	10	1	--	-	--	-	--	-
..ZYGNEMATALES								
...DESMIDIACEAE								
....STAURASTRUM	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	25	2	110	10	58#	17	140#	20
....MELOSIRA	--	-	--	-	--	-	--	-
....STEPHANODISCUS	--	-	28	2	29	9	--	-
..PENNALES								
...ACHNANTHACEAE								
....COCCONEIS	--	-	--	-	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	14	1	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	*	0	--	-	29	9	13	2
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...OCHROMONADACEAE								
....OCHROMONAS	--	-	28	2	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	-	--	-	--	-	320#	46
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	14	4	26	4
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	--	-	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	92	7	--	-	--	-	--	-
....APHANIZOMENON	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	170	13	390#	35	--	-	--	-
....PHORMIDIUM	--	-	--	-	--	-	140#	20

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, AUGUST 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	SEP 10,79		MAY 8,80		JUN 3,80		JUN 24,80	
TIME	1400		1000		1400		1400	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..GYMNODINIALES								
...GYMNODINIACEAE								
....GYMNODINIUM	--	-	55	5	--	-	--	-
..PERIDINIALES								
...GLENODINIACEAE								
....GLENODINIUM	--	-	83	7	--	-	--	-

DATE	JUL 15,80		AUG 5,80		SEP 3,80	
TIME	1400		1400		1400	
TOTAL CELLS/ML	4200		1700		2500	
DIVERSITY: DIVISION	1.5		0.7		1.6	
.CLASS	1.5		0.7		1.6	
..ORDER	1.6		0.9		2.1	
...FAMILY	2.1		0.9		2.7	
....GENUS	2.2		0.9		2.7	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...CHARACIACEAE						
....SCHROEDERIA	140	3	--	-	--	-
...COELASTRACEAE						
....COELASTRUM	650#	15	--	-	620#	24
...HYDRODICTYACEAE						
....PEDIASTRUM	310	7	--	-	210	8
...OOCYSTACEAE						
....ANKISTRODESMUS	--	-	--	-	--	-
....CHLORELLA	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-
....OOCYSTIS	130	3	--	-	65	3
...SCENEDESMACEAE						
....SCENEDESMUS	--	-	--	-	90	4
....TETRASTRUM	--	-	--	-	--	-
..TETRASPORALES						
...PALMELLACEAE						
....SPHAEROCYSTIS	--	-	--	-	--	-
..ULOTRICHALES						
...ULOTRICHACEAE						
....BINUCLEARIA	--	-	--	-	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	*	0	39	2	--	-
....PLATYMONAS	--	-	--	-	--	-
..ZYGNEMATALES						
...DESMIDIACEAE						
....STAURASTRUM	*	0	--	-	13	1
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	710#	17	--	-	26	1
....MELOSIRA	130	3	210	12	--	-
....STEPHANODISCUS	--	-	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....COCCONEIS	*	0	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	310	12
...NITZSCHIACEAE						
....NITZSCHIA	--	-	--	-	--	-
.CHRYSOPHYCEAE						
..CHRYSOMONADALES						
...OCHROMONADACEAE						
....OCHROMONAS	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, AUGUST 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	JUL 15,80		AUG 5,80		SEP 3,80	
TIME	1400		1400		1400	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOCHRYSIDACEAE						
....CHROOMONAS	--	-	13	1	90	4
...CRYPTOMONADACEAE						
....CRYPTOMONAS	--	-	--	-	13	1
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	--	-	26	2	750#	29
..HORMOGONALES						
...NOSTOCACEAE						
....ANABAENA	--	-	1400#	83	--	-
....APHANIZOMENON	2100#	50	--	-	--	-
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	--	-	360	14
....PHORMIDIUM	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)						
.DINOPHYCEAE						
..GYMNODINIALES						
...GYMNODINIACEAE						
....GYMNODINIUM	--	-	--	-	--	-
..PERIDINIALES						
...GLENODINIACEAE						
....GLENODINIUM	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	315	314	315	302	300	302	307	304	305	254	251	252
2	315	313	314	302	301	301	305	304	304	255	252	253
3	316	315	315	301	298	299	305	304	304	256	254	255
4	316	314	315	298	297	297	307	304	305	255	254	255
5	317	315	316	298	297	297	308	306	307			
6	311	309	310	298	296	297	311	306	309	254	253	253
7	311	309	310	297	296	297	311	307	309	253	251	253
8	311	309	310	298	296	297	312	304	309			
9	311	309	310	298	296	297	311	307	309	257	254	256
10	310	308	309	299	296	297	312	309	310	259	255	257
11	311	309	310	300	296	297	314	307	309	258	254	256
12	311	309	310	297	295	296	307	305	306	262	253	258
13	311	309	310	296	295	296	306	300	303	260	255	258
14	311	308	309	296	294	295	300	296	297	257	254	255
15	309	308	308	295	294	295	296	289	293	256	252	253
16	308	306	307	301	298	299	289	285	286	253	249	251
17	308	305	306	301	299	299	285	282	284	253	248	249
18	309	307	308	302	300	301	282	279	281	252	249	250
19	310	308	309	302	300	301	279	275	277	252	250	251
20	311	309	310	301	300	300	275	268	272	251	249	250
21	311	305	305	301	299	300	269	263	265	251	248	250
22	306	305	305	302	300	301	265	263	264			
23	305	303	304	302	301	302	268	264	266			
24	303	301	302	302	300	301	270	263	268			
25	301	300	300	301	300	301	270	268	269			
26	300	298	299	302	301	301	268	257	261			
27	300	298	299	304	301	302	257	255	256			
28	300	299	299	306	304	305	256	254	255			
29	300	299	300	305	303	304	254	253	254			
30	301	300	300	303	300	302	254	252	253			
31	301	299	300	---	---	---	255	253	254			
MONTH	317	298	307	306	294	299	314	252	285			

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1												
2												
3												
4												
5												
6												
7												
8												
9										291	290	291
10										291	288	289
11										290	288	289
12										291	288	290
13										291	288	290
14										290	288	289
15										290	288	289
16										290	288	289
17										290	286	288
18										288	287	288
19										288	286	287
20										288	287	288
21										289	288	288
22										288	287	288
23										289	287	288
24										289	288	288
25										290	286	288
26										291	287	289
27										293	289	291
28										295	288	291
29										292	287	289
30										291	288	289
31										290	287	289

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	292	288	290									
2	291	288	290									
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31	---	---	---									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.5	17.5	17.5	11.5	11.5	11.5	7.0	6.5	6.5			
2	18.0	17.5	17.5	11.5	11.0	11.5	6.5	6.0	6.5			
3	18.0	17.5	18.0	11.0	11.0	11.0	6.5	6.0	6.5			
4	17.5	17.5	17.5	11.0	11.0	11.0	6.0	6.0	6.0			
5	17.5	17.0	17.5	11.0	11.0	11.0	6.0	6.0	6.0			
6	17.0	16.0	16.5	11.0	11.0	11.0	6.5	5.5	6.0			
7	16.0	15.0	15.5	11.0	10.0	10.5	5.5	5.0	5.0			
8	15.0	14.5	14.5	10.0	9.5	10.0						
9	14.5	14.0	14.5	9.5	9.5	9.5						
10	14.0	14.0	14.0	10.0	9.5	10.0						
11	14.5	14.0	14.5	10.0	9.0	9.5						
12	14.0	14.0	14.0	9.0	8.5	9.0						
13	14.0	12.5	13.0	9.0	8.5	8.5						
14	12.5	12.0	12.5	9.0	9.0	9.0						
15	12.5	12.0	12.5	9.0	8.5	8.5						
16	12.5	12.0	12.0	8.5	8.0	8.5						
17	12.5	12.0	12.5	8.5	8.0	8.0						
18	13.0	12.5	12.5	8.5	8.0	8.0						
19	14.0	12.5	13.0	8.0	8.0	8.0						
20	14.0	14.0	14.0	9.0	8.0	8.5						
21	15.0	14.0	14.5	9.0	8.5	9.5						
22	15.0	14.5	15.0	9.5	8.5	9.0						
23	15.0	14.5	14.5	9.5	9.0	9.5						
24	14.5	13.0	13.5	9.5	9.0	9.5						
25	13.0	12.5	12.5	9.0	8.5	9.0						
26	12.5	11.5	12.0	9.5	9.0	9.0						
27	12.0	11.5	12.0	9.0	8.5	8.5						
28	12.5	12.0	12.0	8.5	8.5	8.5						
29	12.0	11.5	11.5	8.5	8.0	8.0						
30	11.5	11.0	11.5	8.0	7.0	7.5						
31	11.5	11.0	11.0	---	---	---						
MONTH	18.0	11.0	14.0	11.5	7.0	9.5						

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1												
2												
3												
4												
5												
6												
7												
8												
9										7.0	7.0	7.0
10										7.5	6.5	7.0
11										9.0	7.5	8.0
12										9.0	8.0	8.5
13										9.0	8.5	9.0
14										9.0	8.0	8.5
15										8.5	8.0	8.0
16										9.5	8.5	9.0
17										10.0	9.5	9.5
18										10.0	9.5	10.0
19										10.5	10.0	10.0
20										11.0	10.0	10.5
21										11.5	10.5	11.0
22										11.0	10.0	10.5
23										11.5	10.5	10.0
24										11.5	11.0	11.5
25										12.0	11.0	11.5
26										11.5	10.5	11.5
27										10.5	10.0	10.0
28										12.0	10.0	10.5
29										12.5	11.5	12.0
30										13.0	12.0	12.5
31										14.0	12.5	13.5

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.0	13.5	13.5									
2	14.0	13.5	14.0									
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31	---	---	---									

431607077385301 (042202528) LAKE ONTARIO NEAR ROCHESTER, NY

LOCATION.--Lat 43°16'07", long 77°38'53", Monroe County, Hydrologic Unit 04150200, at Shoremont filtration plant on Dewey Avenue, Rochester.

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975 (a), 1976-80 (b).
MINOR ELEMENTS DATA: 1975 (a), 1976-80 (b).
RADIOCHEMICAL DATA: 1975 (a), 1976-80 (b).
PESTICIDE DATA: 1975 (a), 1976-80 (b).
ORGANIC DATA: OC--1975 (a), 1976 (b), 1977 (a), 1978-80 (b).
PCB--1975 (a), 1976 (b), 1977 (a), 1978-80 (b).
PCN--1975 (a), 1976 (b), 1977 (a), 1978-80 (b).

REMARKS.--Samples are collected from raw-water tap in filtration plant laboratory. Analyses of treated-water samples collected at the Shoremont filtration plant are available in the files of the Geological Survey.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)
DEC 14...	1000	355	7.6	9.0	130	43	40	7.7	13	1.4	89	28
FEB 27...	1000	335	7.2	5.0	130	38	39	7.8	13	1.3	92	28
JUL 01...	1000	350	7.8	18.0	120	22	37	7.3	11	1.5	100	26
SEP 22...	1100	315	7.4	19.0	140	52	40	9.0	12	1.5	85	26

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)
DEC 14...	25	.1	.4	192	169	.32	.00	.32	.03	.39	.42	.74
FEB 27...	26	.2	.4	179	171	.24	.00	.24	.00	.14	.14	.38
JUL 01...	24	.2	.2	203	167	.31	.00	.31	.02	.44	.46	.77
SEP 22...	26	.1	.3	187	166	.25	.00	.25	.01	.24	.25	.50

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
DEC 14...	.02	30	1	0	0	10	0	5	150	17	10	0
FEB 27...	.03	0	1	<50	1	--	0	6	120	24	0	10
JUL 01...	.07	40	1	<50	0	20	0	6	90	4	10	20
SEP 22...	.01	40	1	100	0	10	0	5	60	1	10	40

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)
DEC 14...	<.1	--	2	0	0	90	10	3.8	.00	.00	.0	.00
FEB 27...	<.1	1	2	0	0	240	20	4.7	.01	.00	.0	.00
JUL 01...	<.1	1	1	0	0	100	10	1.1	.00	.00	.0	.00
SEP 22...	<.1	2	0	0	0	100	20	1.9	.00	.00	.0	.00

431607077385301 (042202528) LAKE ONTARIO NEAR ROCHESTER, NY--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)
DEC 14...	.00	.0	.00	.00	.00	.00	.00	.00
FEB 27...	.00	.0	.00	.00	.00	.00	.00	.00
JUL 01...	.00	.0	.00	.00	.00	.00	.00	.00
SEP 22...	.00	.0	.00	.00	.00	.00	.00	.00

DATE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)
DEC 14...	.00	.00	.00	.00	.00	.00	.00	.00	.00
FEB 27...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUL 01...	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP 22...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
DEC 14...	.00	.00	.00	0	.00	.00	.00	.00
FEB 27...	.00	.00	.00	0	.00	.00	.00	.00
JUL 01...	.00	.00	.00	0	.00	.00	.00	.00
SEP 22...	.00	.00	.00	0	.00	.00	.00	.00

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RA-226, DIS-SOLVED, PLAN-CHET COUNT (PCI/L)	STRON-TIUM 90 DIS-SOLVED (PCI/L)
DEC 14...	<2.5	<.4	<1.7	<.3	3.1	<.4	2.9	<.4	<.1	<.4
JUL 01...	<2.2	<.4	<1.5	<.3	5.8	.5	5.6	.5	<.1	1.1

04221000 GENESEE RIVER AT WELLSVILLE, NY

LOCATION.--Lat 42°07'20", long 77°57'27", Allegany County, Hydrologic Unit 04130002, on left bank 35 ft (11 m) upstream from concrete weir at Wellsville, 0.5 mi (0.8 km) upstream from bridge on State Highway 17, 0.6 mi (1.0 km) upstream from Crowner Brook and sewage treatment plant, and 0.6 mi (1.0 km) downstream from Dyke Creek.

DRAINAGE AREA.--289 mi² (749 km²).

PERIOD OF RECORD.--August 1955 to September 1958, October 1972 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,470.00 ft (448.056 m) National Geodetic Vertical Datum of 1929. October 1957 to September 1958, nonrecording gage at site 0.4 mi (0.6 km) upstream at datum 3.00 ft (0.91 m) higher. August 1955 to September 1957, at same site at datum 8.00 ft (2.438 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Record for station 04221500 Genesee River at Scio, 5.2 mi (8.4 km) downstream, published for June 1916 to September 1972.

AVERAGE DISCHARGE.--11 years (1955-58, 1972-80), 424 ft³/s (12.01 m³/s), 19.92 in/yr (506 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft³/s (447 m³/s) Mar. 8, 1956, gage height, 12.65 ft (3.856 m) site and datum then in use, from graph based on gage readings; minimum daily, 18 ft³/s (0.51 m³/s) Sept. 9, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since before June 1916, 38,500 ft³/s (1,090 m³/s) June 23, 1972, gage height, 20.7 ft (6.31 m) present datum, from floodmark, on basis of contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft³/s (102 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 26	1830	*5,540	157	* 9.22	2.810	Mar. 31	0900	4,360	123	8.50	2.591
Mar. 21	1930	4,200	119	8.40	2.560						

Minimum discharge, 22 ft³/s (0.62 m³/s) Sept. 28, 29, 30, gage height, 4.24 ft (1.292 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	129	559	420	86	80	1950	515	93	100	36	31
2	78	195	485	360	82	74	1410	522	90	78	41	67
3	102	274	412	300	78	66	1120	638	225	70	106	79
4	112	198	375	260	74	62	1150	465	182	64	82	48
5	546	181	348	250	70	60	1000	406	111	61	55	40
6	1710	176	346	250	68	160	794	370	93	82	52	36
7	606	184	364	270	66	140	696	335	90	62	49	33
8	547	179	349	330	66	2100	633	292	154	60	124	33
9	566	171	285	350	66	1060	1310	266	131	59	64	31
10	487	309	264	300	66	539	1420	240	143	54	53	30
11	448	261	280	250	66	625	1030	226	114	49	51	29
12	383	219	319	370	66	339	912	230	98	46	51	28
13	399	213	368	391	66	305	887	327	87	44	46	27
14	331	270	306	216	66	253	1040	617	80	41	48	32
15	295	239	273	205	66	293	1460	373	233	40	122	38
16	258	238	240	190	66	380	1010	307	360	40	82	33
17	229	214	220	177	76	852	853	270	160	40	55	32
18	213	206	200	187	100	2130	745	270	122	40	53	33
19	195	191	200	184	86	914	630	289	104	37	56	31
20	182	181	210	161	68	918	548	247	130	35	47	29
21	169	168	230	147	68	2100	480	232	152	34	41	27
22	154	163	232	130	100	1680	419	212	108	42	39	26
23	155	162	290	120	450	1030	372	183	89	42	37	27
24	221	176	887	105	332	1110	337	165	81	36	36	25
25	181	296	2080	126	194	1190	332	152	74	33	34	24
26	175	2580	1510	130	120	804	290	133	70	31	32	25
27	159	2300	995	120	100	788	266	122	64	30	30	24
28	172	1220	788	110	92	1020	578	114	61	30	30	23
29	170	916	675	100	88	2700	855	108	67	44	30	24
30	147	700	583	92	---	1980	599	101	204	52	31	23
31	134	---	503	90	---	3060	---	99	---	45	37	---
TOTAL	9612	12909	15176	6691	2992	28812	25126	8826	3770	1521	1650	988
MEAN	310	430	490	216	103	929	838	285	126	49.1	53.2	32.9
MAX	1710	2580	2080	420	450	3060	1950	638	360	100	124	79
MIN	78	129	200	90	66	60	266	99	61	30	30	23
CFSM	1.07	1.49	1.70	.75	.36	3.22	2.90	.99	.44	.17	.18	.11
IN.	1.24	1.66	1.95	.86	.39	3.71	3.23	1.14	.49	.20	.21	.13

CAL YR 1979 TOTAL 154750 MEAN 424 MAX 6170 MIN 37 CFSM 1.47 IN 19.92
WTR YR 1980 TOTAL 118073 MEAN 323 MAX 3060 MIN 23 CFSM 1.12 IN 15.20

04221990 RUSHFORD LAKE AT CANEADEA DAM, NY

04221991 CANEADEA CREEK AT CANEADEA DAM, NY

LOCATION.--Lat 42°22'49", long 78°11'00", Allegany County, Hydrologic Unit 04130002, in control structure of Caneadea Dam at outlet of Rushford Lake, and 2.4 mi (3.9 km) upstream from mouth.

DRAINAGE AREA.--60.7 mi^2 (157 km^2).

PERIOD OF RECORD.--October 1968 to current year. July 1928 to current year in files of Rochester Gas and Electric Corp.

GAGE.--Water-stage recorder. Elevation of gage is 1,440 ft (439 m) National Geodetic Vertical Datum of 1929 (furnished by Rochester Gas and Electric Corp.).

REMARKS.--Outflow from Rushford Lake (capacity, 1,106 mil ft^3 or 31.3 hm^3) used for power generation. Discharge computed by orifice and (or) weir formula. Flow regulated by gates at dam completed in 1928. Area of water surface, 0.89 mi^2 (2.31 km^2). Daily discharge record at a site 2 miles (3.2 km) downstream is published for July 1949 to September 1968 as station 04222000 Caneadea Creek at Caneadea, NY.

AVERAGE DISCHARGE.--12 years, 90.4 ft^3/s (2.56 m^3/s), 20.22 in/yr (514 mm/yr), unadjusted.

MONTHEND ELEVATION, CONTENTS, AND MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCT. 1979 TO SEPT. 1980

	04221990 RUSHFORD LAKE			04221991 CANEADEA CREEK AT CANEADEA DAM			
	* Elevation FT	Contents FT^3	Change in contents FT^3/S	Observed discharge MEAN	‡ Adjusted for change in contents in Rushford Lake MEAN	CFSM	IN.
October	1,420.3	692.41	0	7.84	7.84	0.13	0.15
November	1,409.1	515.20	- 68.4	107	38.8	.64	.71
December	1,420.0	686.97	+ 64.1	69.1	133	2.20	2.53
CAL YR 1979			+ 5.27	75.0	80.3	1.32	17.95
January	1,420.1	686.78	+ .68	11.0	11.7	.19	.22
February	1,420.0	686.97	- .72	1.14	.41	.01	.01
March	1,434.3	971.05	+106	66.7	173	2.85	3.28
April	1,437.0	1,034.12	+ 24.3	156	181	2.98	3.32
May	1,440.3	1,113.18	+ 29.5	0	29.5	.49	.56
June	1,440.5	1,118.02	+ 1.87	7.07	8.93	.15	.16
July	1,440.5	1,118.02	0	.10	.10	0	0
August	1,440.5	1,118.02	0	18.9	18.9	.31	.36
September	1,426.6	809.83	-119	125	6.50	.11	.12
WTR YR 1980			+ 3.71	47.3	51.0	.84	11.43

* Elevation at 2400 hours on last day of month.
‡ Adjustments by Geological Survey.

NOTE.--All figures of contents expressed in millions.

04223000 GENESEE RIVER AT PORTAGEVILLE, NY

LOCATION.--Lat 42°34'13", long 78°02'33", Wyoming County, Hydrologic Unit 04130002, on left bank at Portageville, 500 ft (152 m) downstream from bridge on State Highway 436, 800 ft (244 m) upstream from abandoned railroad bridge piers, and 0.9 mi (1.4 km) upstream from Upper Falls.

DRAINAGE AREA.--981 mi^2 (2,541 km^2).

PERIOD OF RECORD.--August 1908 to current year. Prior to December 1945, published as "at St. Helena". Records published for both sites December 1945 to September 1950.

REVISED RECORDS.--WSP 264: 1908. WSP 564: 1916(M). WSP 2112: Drainage area. WRD NY 1972: 1950(M), 1951(M), 1956(M), 1959(M), 1964(M), 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 1,080.00 ft (329.184 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Aug. 24, 1911, nonrecording gage and Aug. 24, 1911 to Sept. 30, 1946, water-stage recorder at site 8 mi (13 km) downstream at different datum. Oct. 1, 1946 to June 21, 1972, water-stage recorder at site 1,200 ft (366 m) downstream at datum 2.60 ft (0.792 m) higher (destroyed by flood of June 1972). July 12, 1972 to May 18, 1973, nonrecording gage at site 500 ft (152 m) upstream at datum 11.48 ft (3.499 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor. Since July 1928, some seasonal regulation by Rushford Lake. Diurnal fluctuation at low flow caused by powerplant. Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake.

AVERAGE DISCHARGE.--72 years, 1,254 ft^3/s (35.51 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 90,000 ft^3/s (2,550 m^3/s) June 23, 1972, gage height, 35.25 ft (10.744 m) site and datum then in use, from high-water mark, from rating curve extended above 25,000 ft^3/s (708 m^3/s) on basis of contracted-opening measurement of 71,000 ft^3/s (2,010 m^3/s) at highway bridge 0.4 mi (0.6 km) upstream and contracted-opening measurement of 98,200 ft^3/s (2,780 m^3/s) 0.7 mi (1.1 km) downstream from gage; minimum, 18 ft^3/s (0.51 m^3/s) Oct. 5, 17, 1913, gage height, 1.70 ft (0.518 m) site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharges, 14,900 ft^3/s (422 m^3/s) at 2030 hours, Mar. 31, gage height 15.72 ft (4.791 m), no peak above base of 15,000 ft^3/s (425 m^3/s); minimum, 81 ft^3/s (2.29 m^3/s) July 21, gage height, 8.70 ft (2.652 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302	451	1420	1260	280	280	9600	1480	280	384	110	116
2	231	442	1200	1100	260	260	5350	1220	270	280	119	187
3	204	649	1030	880	250	230	3720	1560	280	231	410	613
4	213	577	1220	740	240	220	3320	1150	410	195	622	302
5	313	491	1150	660	230	200	3440	932	359	191	324	200
6	5770	454	1360	600	220	470	2540	807	280	347	245	156
7	2260	450	1430	660	210	700	2050	758	255	240	217	132
8	1660	505	1390	580	210	1800	1690	674	280	204	424	116
9	1570	588	1240	520	210	3840	2270	605	359	191	458	110
10	1660	981	1060	490	210	1880	3410	556	341	179	260	116
11	1310	1160	797	640	210	4750	2500	517	336	163	302	104
12	1100	843	879	2920	210	1900	2000	502	291	149	330	95
13	1030	716	1120	1100	210	940	2310	532	260	138	336	93
14	1150	767	976	1000	210	840	2050	921	231	128	208	149
15	934	800	807	900	210	740	4200	910	226	122	204	245
16	783	791	700	827	220	680	2670	683	622	119	250	336
17	641	734	580	758	230	2090	2000	572	540	116	226	330
18	567	702	520	807	260	7300	1720	540	359	107	183	175
19	520	656	520	797	330	4270	1480	588	291	107	163	132
20	487	610	560	665	300	3840	1280	564	296	122	156	330
21	496	576	600	540	270	7110	1140	509	391	113	145	378
22	452	554	692	500	290	8340	954	487	378	110	128	378
23	469	546	767	420	320	3390	827	451	291	128	122	378
24	928	572	3410	370	1060	3370	748	410	245	125	116	359
25	791	1150	11600	370	868	5540	701	384	226	104	110	132
26	650	5730	8150	390	520	2920	683	347	208	101	104	110
27	582	7940	3700	410	400	2220	622	324	195	98	101	307
28	566	3480	2460	490	330	3100	1130	307	191	93	95	341
29	659	2690	1980	400	310	7020	4020	296	226	98	93	341
30	586	1850	1770	340	---	7790	2310	285	302	104	98	341
31	499	---	1500	300	---	10200	---	285	---	107	104	---
TOTAL	29383	38455	56588	22434	9078	98230	72735	20156	9219	4894	6763	7102
MEAN	948	1282	1825	724	313	3169	2425	650	307	158	218	237
MAX	5770	7940	11600	2920	1060	10200	9600	1560	622	384	622	613
MIN	204	442	520	300	210	200	622	285	191	93	93	93

CAL YR 1979 TOTAL 553708 MEAN 1517 MAX 19700 MIN 81 CFSM 1.55 IN 21.00
WTR YR 1980 TOTAL 375037 MEAN 1025 MAX 11600 MIN 93 CFSM 1.05 IN 14.22

04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°44'00", long 77°54'40", Livingston County, Hydrologic Unit 04130002, at Mount Morris Dam on Genesee River, 2.0 mi (3.2 km) northwest of Mount Morris, 5 mi (8 km) upstream from Canaseraga Creek, and 40 mi (64 km) upstream from mouth.

DRAINAGE AREA.--1,075 mi^2 (2,784 km^2).

PERIOD OF RECORD.--January 1952 to current year. Prior to October 1970, published as "Mount Morris Reservoir near Mount Morris."

REVISED RECORDS.--WSP 1437: 1955. WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Apr. 8, 1952, reference point at same site and datum.

REMARKS.--Lake is formed by a concrete gravity-type dam with overflow spillway, completed by Corps of Engineers in 1951 for flood control; first used for flood regulation on Nov. 24, 1951. Usable capacity, 336,800 acre-ft (415 hm^3) between elevation 585.0 ft (178.31 m), sill of conduits, and 760.0 ft (231.65 m), crest of spillway. Dead storage, 609 acre-ft (751,000 m^3). Discharge is controlled by the operation of nine gates. Water is stored during high flows and released when downstream conditions warrant.

COOPERATION.--Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 755.46 ft (230.264 m) June 25, 1972, contents, 322,600 acre-ft (398 hm^3); minimum, 584.23 ft (178.073 m) Sept. 2, 1976, contents, 475.8 acre-ft (587,000 m^3).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 666.26 ft (203.076 m) Apr. 2, contents, 90,620 acre-ft (112 hm^3); minimum, 585.32 ft (178.406 m) Aug. 30, contents, 664.4 acre-ft (819,200 m^3).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Furnished by Corps of Engineers in 1953)

584.00	436	600.00	5,610	640.00	43,700
586.00	782	605.00	8,250	660.00	78,200
588.00	1,210	610.00	11,600	680.00	119,800
590.00	1,730	620.00	19,800	700.00	166,300
595.00	3,410	630.00	30,500	730.00	245,200
				750.00	305,100

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	593.81	601.34	641.33	630.80	592.32	617.10	662.81	611.33	585.58	585.56	585.54	585.42
2	592.61	597.92	641.02	624.35	592.06	617.84	665.95	607.23	585.58	585.53	585.55	585.71
3	591.91	595.03	640.28	618.08	591.88	618.54	665.56	602.83	585.57	585.53	585.56	586.80
4	591.20	596.34	638.50	611.95	592.12	619.27	663.76	599.16	585.57	585.53	585.56	586.69
5	592.09	594.58	635.91	605.92	592.11	620.08	660.80	593.83	585.58	585.51	585.56	586.01
6	606.38	594.50	632.20	596.23	591.86	621.05	656.84	590.05	585.58	585.51	585.57	585.80
7	621.95	594.77	627.70	592.95	592.49	621.89	651.39	585.51	585.59	585.51	585.56	585.62
8	625.71	594.35	622.65	592.61	592.76	622.61	645.89	585.49	585.59	585.52	585.56	585.57
9	628.26	593.23	616.81	591.67	592.55	629.78	640.60	585.46	585.58	585.53	585.56	585.51
10	630.86	594.31	609.80	591.46	592.56	634.12	636.93	585.45	585.36	585.54	585.56	585.50
11	632.83	597.68	604.46	592.38	592.26	638.33	633.30	585.45	585.36	585.57	585.56	585.49
12	634.37	594.83	596.38	601.46	592.35	641.45	628.47	585.45	585.35	585.58	585.57	585.42
13	635.53	592.77	594.25	603.61	592.19	640.83	624.37	585.45	585.57	585.59	585.58	585.40
14	636.74	589.14	592.46	595.26	592.11	639.16	621.29	585.46	585.57	585.59	585.58	585.67
15	637.87	587.84	587.82	591.45	592.08	637.32	620.91	585.74	585.58	585.55	585.58	585.95
16	638.41	587.77	587.41	588.37	592.02	635.34	621.74	585.45	585.61	585.51	585.61	586.30
17	637.41	587.73	586.98	587.80	591.84	634.11	619.46	585.44	585.60	585.52	585.65	586.41
18	634.99	587.59	586.48	588.27	591.57	638.33	616.03	585.44	585.59	585.52	585.64	586.08
19	631.35	587.50	586.50	588.85	591.60	643.74	612.76	585.39	585.59	585.52	585.64	585.64
20	627.26	587.35	586.53	588.38	591.52	644.96	608.52	585.58	585.60	585.51	585.64	585.98
21	622.65	587.23	586.94	587.91	591.94	646.25	603.28	585.58	585.59	585.51	585.63	586.58
22	617.50	587.15	587.06	587.66	592.30	652.82	595.23	585.58	585.59	585.53	585.62	586.57
23	613.24	592.62	587.47	587.56	594.33	654.38	592.53	585.58	585.59	585.53	585.63	586.57
24	611.84	603.85	594.19	587.09	600.30	652.92	591.68	585.58	585.60	585.53	585.62	586.55
25	611.83	608.58	619.53	589.90	607.22	652.57	592.03	585.58	585.61	585.54	585.61	586.00
26	610.46	617.42	639.66	593.50	610.80	652.37	591.43	585.59	585.63	585.54	585.61	585.48
27	608.88	632.53	644.84	594.53	613.15	649.21	591.03	585.59	585.65	585.54	585.74	585.84
28	607.39	638.60	645.64	594.28	614.83	645.19	593.33	585.58	585.63	585.54	585.52	586.42
29	606.16	640.41	644.43	593.74	616.19	643.17	606.03	585.57	585.59	585.62	585.35	586.42
30	605.19	641.22	641.11	593.49	---	647.67	612.73	585.56	585.61	585.54	585.34	586.41
31	603.63	---	636.33	592.86	---	651.83	---	585.57	---	585.54	585.43	---
MEAN	617.43	600.21	614.28	596.27	595.98	637.56	624.22	588.47	585.57	585.54	585.57	585.99
MAX	638.41	641.22	645.64	630.80	616.19	654.38	665.95	611.33	585.65	585.62	585.74	586.80
MIN	591.20	587.15	586.48	587.09	591.52	617.10	591.03	585.39	585.35	585.51	585.34	585.40
*	6,993	45,710	35,100	2,544	16,850	74,420	13,660	707.6	712.8	697.2	674.7	870.6
**	+62	+651	-172	-530	+249	+936	-1,020	-211	+.09	-.25	-.36	+3.29

CAL YR 1979 MEAN 610.07 MAX 691.03 MIN 585.36 ** +29.9
WTR YR 1980 MEAN 601.48 MAX 665.95 MIN 585.34 ** -3.18

* Contents, in acre-feet, at end of month.
** Change in contents, equivalent in cubic feet per second.

04224775 CANASERAGA CREEK ABOVE DANSVILLE, NY

LOCATION.--Lat 42°32'08", long 77°42'16", Livingston County, Hydrologic Unit 0413002, on right bank on Poags Hole Road, 0.7 mi (1.1 km) upstream from Stony Brook, and 1.7 mi (2.7 km) south of Dansville.

DRAINAGE AREA.--90.0 mi^2 (233 km^2).

PERIOD OF RECORD.--August 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 715.60 ft (218.115 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--6 years, 110 ft^3/s (3.115 m^3/s), 16.60 in/yr (422 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,870 ft^3/s (81.3 m^3/s) Sept. 20, 1977, gage height, 5.51 ft (1.679 m); minimum discharge, 7.4 ft^3/s (0.21 m^3/s) Sept. 11, 1975; minimum gage height, 0.70 ft (0.213 m) many days in August and September 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Dec. 25	0845	1,260	35.7	3.52	1.073	Mar. 31	0930	1,220	34.6	3.45	1.052
Mar. 21	2100	*1,480	41.9	*3.80	1.158						

Minimum discharge, 8.5 ft^3/s (0.24 m^3/s) many days in August and September, gage height, 0.70 ft (0.213 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	19	83	99	32	24	652	166	28	22	9.9	8.8
2	9.5	22	75	92	28	23	436	134	26	18	20	19
3	11	25	65	81	26	22	299	114	30	16	52	23
4	12	21	64	62	25	23	283	99	30	15	26	12
5	37	19	61	66	26	25	268	88	24	16	14	10
6	173	24	75	58	26	45	192	79	22	17	12	9.5
7	57	32	78	54	25	45	163	77	22	15	11	8.8
8	45	33	78	50	25	100	143	68	27	15	12	8.8
9	49	32	63	49	24	110	156	64	27	14	11	8.8
10	45	40	58	46	25	150	173	59	24	13	9.9	9.2
11	37	41	59	56	24	335	143	57	21	13	33	8.8
12	30	36	58	140	24	107	134	57	19	12	27	8.8
13	32	34	62	60	24	72	149	59	17	11	16	8.8
14	39	37	56	68	25	77	156	65	16	11	14	20
15	32	37	47	68	24	68	253	62	19	11	16	17
16	27	38	43	62	25	72	177	54	30	11	13	11
17	23	36	40	64	26	253	149	50	22	12	11	11
18	21	35	40	66	27	462	137	51	19	13	11	11
19	20	34	40	62	26	258	120	49	18	10	9.9	9.9
20	19	33	40	54	27	368	109	46	23	11	9.5	9.5
21	19	31	42	48	29	747	99	44	23	10	9.2	9.2
22	17	31	46	50	42	625	86	41	19	10	8.8	9.2
23	19	31	80	43	120	288	79	36	17	10	8.8	9.2
24	46	33	244	34	56	316	74	34	16	9.9	8.8	8.8
25	31	127	995	40	37	436	75	32	15	9.9	8.8	8.8
26	25	409	579	36	28	253	67	30	15	9.9	8.8	9.9
27	21	246	278	35	31	217	65	29	15	10	8.8	8.8
28	23	142	188	36	29	278	278	28	16	9.9	8.8	8.8
29	26	126	159	33	24	605	413	27	20	10	8.8	8.5
30	23	100	140	31	---	514	234	27	30	10	8.8	8.5
31	20	---	117	32	---	785	---	30	---	9.9	8.8	---
TOTAL	998.5	1904	4053	1775	910	7703	5762	1856	650	385.5	435.4	323.4
MEAN	32.2	63.5	131	57.3	31.4	248	192	59.9	21.7	12.4	14.0	10.8
MAX	173	409	995	140	120	785	652	166	30	22	52	23
MIN	9.5	19	40	31	24	22	65	27	15	9.9	8.8	8.5
CFSM	.36	.71	1.46	.64	.35	2.76	2.13	.67	.24	.14	.16	.12
IN.	.41	.79	1.68	.73	.38	3.18	2.38	.77	.27	.16	.18	.13

CAL YR 1979 TOTAL 40002.3 MEAN 110 MAX 1400 MIN 9.5 CFSM 1.22 IN 16.53
WTR YR 1980 TOTAL 26755.8 MEAN 73.1 MAX 995 MIN 8.5 CFSM .81 IN 11.06

04227000 CANASERAGA CREEK AT SHAKERS CROSSING, NY

LOCATION.--Lat 42°44'13", long 77°50'26", Livingston County, Hydrologic Unit 04130002, on left bank 30 ft (9 m) upstream from bridge on State Highway 408 at Shakers Crossing, 1.3 mi (2.1 km) upstream from mouth, and 1.5 mi (2.4 km) northeast of Mount Morris.

DRAINAGE AREA.--333 mi^2 (862 km^2).

PERIOD OF RECORD.--July 1915 to September 1922 (gage height only), November 1958 to September 1970, October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 545.52 ft (166.274 m) National Geodetic Vertical Datum of 1929. Prior to October 1974, at site 30 ft (9 m) downstream at same datum. Prior to November 1958, at site 40 ft (12 m) downstream at datum 5.52 ft (1.682 m) lower. April 1968 to September 1970, and since October 1974, auxiliary water-stage recorder 0.6 mi (1.0 km) downstream from base gage.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--17 years (1959-70, 1975-80), 294 ft^3/s (8.326 m^3/s), 11.19 in/yr (305 mm/yr).

EXTREMES FOR PERIODS OF RECORD.--Maximum discharge, 5,270 ft^3/s (149 m^3/s) Mar. 4, 1976, gage height, 13.33 ft (4.063 m); maximum gage height, 23.62 ft (7.199 m) present datum, May 17, 1916 (backwater from Genesee River); minimum discharge, 4.3 ft^3/s (0.12 m^3/s) Aug. 19, 1970, gage height, 2.26 ft (0.689 m), result of temporary regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft^3/s (85.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 25	1145	*3,620	103	*11.37	3.466

Minimum discharge, 30 ft^3/s (0.85 m^3/s) July 26; minimum gage height, 2.30 ft (0.701 m) Aug. 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	115	275	424	110	86	2140	440	88	130	34	38
2	57	120	244	389	110	70	1540	364	84	100	34	75
3	62	139	208	331	100	72	1030	313	91	88	154	110
4	83	123	240	236	100	76	660	277	96	75	104	64
5	94	110	222	230	100	84	597	256	81	144	66	51
6	571	106	264	220	100	120	172	213	74	160	59	44
7	394	117	286	220	98	150	92	218	75	90	53	40
8	226	130	246	210	96	286	34	198	95	79	73	37
9	218	118	204	190	96	605	42	194	91	73	57	36
10	236	149	201	180	94	702	158	182	87	68	47	44
11	183	163	197	220	92	1420	57	172	78	64	68	39
12	158	132	183	594	92	443	62	173	70	54	114	35
13	151	120	193	313	92	266	248	178	65	51	71	34
14	163	141	180	310	92	208	322	206	61	50	56	100
15	151	141	150	310	90	197	645	205	91	46	71	120
16	141	134	130	280	90	258	441	175	174	48	68	66
17	124	127	120	250	90	801	359	156	104	42	51	56
18	110	120	120	250	88	1260	335	153	86	46	46	60
19	107	114	120	240	90	651	311	156	79	41	46	50
20	101	110	120	220	94	735	288	143	101	48	42	46
21	100	104	120	180	100	1440	294	131	97	42	40	46
22	103	104	130	172	151	2100	266	125	79	41	37	42
23	106	104	193	191	400	1020	246	115	70	50	37	44
24	244	109	556	170	238	717	232	105	65	40	37	43
25	178	210	2920	160	160	1580	236	100	107	35	36	39
26	144	798	2380	150	130	873	220	93	120	32	34	48
27	124	846	1470	160	110	501	195	88	74	41	33	49
28	135	424	1060	150	90	581	408	86	97	44	32	42
29	153	387	690	130	90	1100	1190	86	165	42	35	40
30	139	326	563	130	---	1730	667	85	226	42	37	39
31	124	---	494	120	---	2020	---	99	---	38	46	---
TOTAL	4938	5941	14479	7330	3383	22152	13487	5485	2871	1944	1718	1577
MEAN	159	198	467	236	117	715	450	177	95.7	62.7	55.4	52.6
MAX	571	846	2920	594	400	2100	2140	440	226	160	154	120
MIN	57	104	120	120	88	70	34	85	61	32	32	34
CFSM	.48	.60	1.40	.71	.35	2.15	1.35	.53	.29	.19	.17	.16
IN.	.55	.66	1.62	.82	.38	2.47	1.51	.61	.32	.22	.19	.18

CAL YR 1979 TOTAL 150762 MEAN 413 MAX 4790 MIN 27 CFSM 1.24 IN 16.84
WTR YR 1980 TOTAL 85305 MEAN 233 MAX 2920 MIN 32 CFSM .70 IN 9.53

04227500 GENESEE RIVER NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°46'00", long 77°50'21", Livingston County, Hydrologic Unit 04130002, on right bank 100 ft (30 m) north of Jones Bridge Road, 0.8 mi (1.3 km) downstream from Canaseraga Creek, and 2.8 mi (4.5 km) northeast of Mount Morris.

DRAINAGE AREA.--1,417 mi^2 (3,670 km^2).

PERIOD OF RECORD.--May 1903 to April 1906, August 1908 to April 1914, July 1915 to current year. Prior to 1968, published as "at Jones Bridge."

REVISED RECORDS.--WSP 1277: 1952. WSP 1387: 1913. WSP 1437: 1955. WSP 2112: Drainage area. WDR NY-78-1: 1974-77 (M,m).

GAGE.--Water-stage recorder. Datum of gage is 540.12 ft (164.629 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 11, 1915, nonrecording gage on bridge at datum 2.85 ft (0.869 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Diurnal fluctuation at low flow caused by powerplant. Flow regulated to some extent by Rushford Lake (see station 04221991) since July 1928, and at high flows since November 1951 by Mount Morris Lake (see station 04224000). Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--70 years (1908-13, 1915-80), 1,661 ft^3/s (47.04 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,100 ft^3/s (1,560 m^3/s) May 17, 1916, gage height, 25.44 ft (7.754 m); minimum, 12 ft^3/s (0.34 m^3/s) July 23, 1955, gage height, 0.22 ft (0.067 m), partially obstructed intake; minimum daily, 30 ft^3/s (0.85 m^3/s) Aug. 8, 1909.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,620 ft^3/s (244 m^3/s) Apr. 7, gage height, 13.15 ft (4.008 m), minimum, 44 ft^3/s (1.25 m^3/s) Aug. 28, Sept. 12, 13, gage height, 1.31 ft (0.399 m), result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	529	1120	2180	5580	620	150	5420	3410	413	578	161	139
2	425	1030	2150	5020	600	140	6650	3130	397	467	158	230
3	389	952	2430	3830	580	130	6860	2810	407	368	405	552
4	367	969	3260	2920	580	140	7090	2500	445	323	793	578
5	417	906	3790	2390	560	150	8160	1700	572	374	566	318
6	1240	712	4410	1800	540	160	8200	1480	428	492	374	247
7	865	715	4630	1000	520	500	8430	1360	387	443	311	209
8	664	802	4320	860	500	2400	7290	1190	419	348	326	192
9	663	886	3980	780	490	2660	6800	1060	446	279	686	177
10	705	1110	3090	700	460	2630	6660	967	507	283	400	177
11	650	1810	2340	820	460	3860	6390	888	450	264	340	168
12	625	1460	1830	2210	450	2720	5810	851	429	241	491	105
13	621	1220	1500	2510	430	3190	4890	871	380	226	427	109
14	644	1170	1500	1960	400	2890	4340	1180	349	213	361	261
15	629	1280	1260	1790	380	2760	4620	1600	364	207	296	370
16	1320	1230	1000	1760	370	2800	4470	1190	573	205	301	374
17	2320	1200	960	1460	350	3200	4240	961	975	192	329	412
18	3080	1110	840	1600	320	3770	3770	881	567	194	277	365
19	3350	1060	740	1610	300	3350	3320	946	436	188	243	225
20	3210	987	740	1200	320	4390	3090	979	438	145	216	241
21	3070	930	760	980	340	5500	2800	828	463	220	210	435
22	2780	889	800	800	370	6510	1980	765	549	180	193	441
23	1720	596	980	760	900	5730	1500	710	441	186	177	445
24	1530	149	2440	740	700	6420	1330	627	357	197	174	435
25	1470	222	5480	560	310	7190	1260	564	380	184	170	344
26	1400	801	4070	672	230	6020	1190	511	368	173	165	207
27	1330	1120	3790	815	170	6760	1080	469	327	182	149	204
28	1320	1800	4040	793	150	7280	1470	443	342	169	95	405
29	1310	2290	4710	719	150	7140	3820	427	429	132	171	409
30	1270	2240	5730	660	---	6940	3760	415	535	176	132	399
31	1190	---	5950	640	---	5770	---	421	---	148	141	---
TOTAL	41103	32766	85700	49939	12550	113250	136690	36134	13573	7977	9238	9173
MEAN	1326	1092	2765	1611	433	3653	4556	1166	452	257	298	306
MAX	3350	2290	5950	5580	900	7280	8430	3410	975	578	793	578
MIN	367	149	740	560	150	130	1080	415	327	132	95	105

CAL YR 1979 TOTAL 801569 MEAN 2196 MAX 9340 MIN 50 CFSM 1.54 IN 20.93
WTR YR 1980 TOTAL 548093 MEAN 1498 MAX 8430 MIN 95 CFSM 1.05 IN 14.31

04227980 CONESUS LAKE NEAR LAKEVILLE, NY

LOCATION.--Lat 42°47'39", long 77°43'15", Livingston County, Hydrologic Unit 04130003, on west shore of Conesus Lake at Geneseo Water Works pumping station, 300 ft (91 m) east of State Highway 256, and 3.0 mi (4.8 km) south of Lakeville.

DRAINAGE AREA.--69.7 mi^2 (181 km^2).

PERIOD OF RECORD.--July 1963 to current year. Since 1930 in files of village of Geneseo.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Oct. 1, 1970 to Sept. 30, 1975, at datum 800.00 ft (243.840 m) higher. Prior to Oct. 1, 1970, nonrecording gage at site 200 ft (61 m) downstream at datum 796.59 ft (242.801 m) higher.

REMARKS.--Lake level maintained by plank and pile dam at outlet. Area of water surface, 5.08 mi^2 (13.2 km^2). Daily average of about 2 ft^3/s (0.057 m^3/s) diverted from lake for water supply for Avon, Geneseo, and Lakeville Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 822.50 ft (250.698 m) June 24, 1972; minimum observed, 816.33 ft (248.817 m) present datum, Nov. 3-8, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 819.21 ft (249.695 m) Apr. 3,4; minimum observed, 816.80 ft (248.961 m) Mar. 4,5,6.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	817.41	817.21	817.32	818.31	817.31	816.85	819.07	818.76	818.48	818.69	818.15	817.67
2	817.39	817.24	817.31	818.28	817.28	816.84	819.17	818.77	818.46	818.67	818.14	817.73
3	817.40	817.22	817.29	818.26	817.25	816.82	819.21	818.77	818.48	818.64	818.18	817.73
4	817.39	817.21	817.27	818.23	817.22	816.80	819.21	818.76	818.48	818.59	818.17	817.72
5	817.41	817.19	817.24	818.19	817.19	816.80	819.20	818.74	818.46	818.60	818.14	817.70
6	817.48	817.17	817.25	818.15	817.17	816.80	819.15	818.72	818.44	818.66	818.10	817.68
7	817.48	817.19	817.26	818.11	817.14	816.81	819.08	818.69	818.44	818.63	818.09	817.65
8	817.48	817.19	817.28	818.06	817.12	816.81	819.04	818.67	818.51	818.59	818.10	817.63
9	817.50	817.19	817.28	818.02	817.10	816.81	819.00	818.64	818.50	818.57	818.08	817.62
10	817.51	817.22	817.28	817.99	817.08	816.86	818.96	818.61	818.49	818.53	818.06	817.61
11	817.50	817.25	817.25	817.95	817.06	817.22	818.92	818.58	818.48	818.48	818.05	817.58
12	817.50	817.25	817.24	817.94	817.03	817.25	818.87	818.57	818.47	818.44	818.03	817.55
13	817.49	817.26	817.24	817.91	817.01	817.25	818.83	818.59	818.46	818.39	818.01	817.53
14	817.48	817.24	817.24	817.89	816.99	817.26	818.79	818.60	818.45	818.36	817.99	817.59
15	817.47	817.20	817.19	817.88	816.97	817.24	818.79	818.60	818.48	818.34	817.97	817.59
16	817.45	817.18	817.14	817.88	816.97	817.26	818.79	818.59	818.60	818.33	817.94	817.58
17	817.44	817.16	817.15	817.86	816.96	817.29	818.76	818.56	818.60	818.31	817.91	817.56
18	817.43	817.1x	817.14	817.84	816.94	817.49	818.72	818.56	818.60	818.30	817.89	817.54
19	817.40	817.16	817.12	817.83	816.92	817.55	818.67	818.58	818.60	818.29	817.87	817.52
20	817.38	817.16	817.10	817.81	816.91	817.60	818.62	818.59	818.63	818.28	817.85	817.50
21	817.36	817.17	817.06	817.76	816.89	817.65	818.58	818.59	818.63	818.29	817.83	817.49
22	817.34	817.13	817.05	817.73	816.88	817.88	818.54	818.58	818.63	818.31	817.80	817.48
23	817.33	817.11	817.07	817.71	816.90	817.95	818.52	818.57	818.62	818.31	817.78	817.48
24	817.35	817.11	817.14	817.69	816.91	817.98	818.49	818.55	818.61	818.29	817.76	817.46
25	817.32	817.16	817.52	817.65	816.90	818.15	818.47	818.54	818.61	818.27	817.74	817.44
26	817.30	817.20	818.03	817.62	816.90	818.27	818.46	818.53	818.64	818.24	817.73	817.43
27	817.28	817.28	818.21	817.60	816.89	818.29	818.45	818.52	818.63	818.23	817.71	817.43
28	817.27	817.28	818.28	817.57	816.88	818.29	818.51	818.51	818.62	818.22	817.69	817.41
29	817.25	817.32	818.31	817.44	816.87	818.36	818.65	818.50	818.68	818.21	817.67	817.40
30	817.24	817.33	818.33	817.37	---	818.50	818.73	818.48	818.71	818.19	817.67	817.38
31	817.22	---	818.32	817.34	---	818.71	---	818.48	---	818.17	817.68	---
MEAN	817.40	817.21	817.42	817.87	817.02	817.47	818.81	818.61	818.55	818.40	817.93	817.56
MAX	817.51	817.33	818.33	818.31	817.31	818.71	819.21	818.77	818.71	818.69	818.18	817.73
MIN	817.22	817.11	817.05	817.34	816.87	816.80	818.45	818.48	818.44	818.17	817.67	817.38

CAL YR 1979 MEAN 817.95 MAX 820.20 MIN 817.05
WTR YR 1980 MEAN 817.85 MAX 819.21 MIN 816.80

04228500 GENESEE RIVER AT AVON, NY

LOCATION.--Lat 42°55'04", long 77°45'27", Livingston County, Hydrologic Unit 04130003, on right bank 250 ft (76 m) downstream from bridge on U.S. Highway 20 (State Highway 5), 0.3 mi (0.5 km) west of Avon, and 0.8 mi (1.3 km) downstream from Conesus Creek.

DRAINAGE AREA.--1,667 mi² (4,318 km²).

PERIOD OF RECORD.--August 1955 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 500.11 ft (152.433 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Diurnal fluctuation at low flow caused by powerplant. Flow regulated to some extent by Rushford Lake (see station 04221990), at high flows by Mount Morris Lake (see station 04224000), and by Conesus Lake (see station 04227980). Monthly figures of discharge and runoff August 1955 to September 1965 adjusted for change in contents in Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--25 years, 1,945 ft^3/s (55.08 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft^3/s (467 m^3/s) June 25, 1972, gage height, 40.67 ft (12.396 m); minimum, 56 ft^3/s (1.59 m^3/s) Oct. 5, 1955, gage height, 13.73 ft (4.185 m), from graph based on gage readings.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,930 ft^3/s (253 m^3/s) Dec. 26, gage height 31.17 ft (9.501 m); minimum, 107 ft^3/s (3.03 m^3/s) Sept. 13, 14, gage height, 13.94 ft (4.249 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	641	1140	2120	5780	900	200	7260	3840	461	673	183	171
2	532	1070	2070	5420	840	180	7030	3460	460	690	199	215
3	462	992	2040	4570	820	160	7180	3090	442	572	211	301
4	429	951	2760	3530	840	160	7030	2780	460	464	514	638
5	416	940	3390	2670	820	170	7840	2150	542	417	738	447
6	766	845	4000	2240	780	180	8030	1620	541	557	496	303
7	1070	788	4470	1430	760	250	8210	1450	448	605	372	248
8	797	821	4390	1200	740	600	7780	1320	627	508	333	221
9	708	878	4110	1100	720	1350	6950	1170	560	433	463	213
10	747	984	3650	980	680	1850	6750	1060	570	360	555	206
11	722	1440	2540	1100	680	5310	6540	979	549	359	373	200
12	682	1700	2120	1600	640	4370	6190	920	507	334	412	191
13	670	1300	1490	2300	640	3890	5470	912	463	296	460	141
14	701	1180	1520	2600	640	3780	4700	1020	412	275	430	167
15	711	1230	1400	2200	620	3600	4840	1470	387	262	351	327
16	732	1220	1140	1980	620	3480	4880	1400	505	243	310	378
17	1610	1190	986	1780	600	4170	4580	1090	795	231	317	417
18	2460	1120	980	1780	580	5250	4290	951	758	225	327	434
19	3140	1070	920	1850	540	3990	3700	928	545	223	279	346
20	3160	1010	1200	1540	560	4310	3410	992	489	211	255	244
21	3040	938	1300	1240	560	5390	3120	930	507	199	232	321
22	2880	898	1300	1020	600	7030	2590	833	549	255	226	455
23	2260	871	1300	968	820	6340	1750	787	554	209	213	464
24	1520	485	2000	900	1190	6370	1490	726	451	223	202	460
25	1490	271	6020	860	749	7930	1360	645	381	221	199	448
26	1380	519	7790	840	380	6790	1310	586	438	211	197	320
27	1310	1240	5380	1100	290	6700	1210	538	404	204	192	226
28	1290	1260	4550	1200	230	7140	1330	503	417	218	171	275
29	1290	2070	4610	1240	230	7360	3400	484	595	192	147	415
30	1250	2170	5460	1000	---	7640	4290	468	675	173	190	420
31	1190	---	5960	960	---	7420	---	466	---	202	165	---
TOTAL	40056	32591	92966	58978	19069	123360	144510	39568	15492	10245	9712	9612
MEAN	1292	1086	2999	1903	658	3979	4817	1276	516	330	313	320
MAX	3160	2170	7790	5780	1190	7930	8210	3840	795	690	738	638
MIN	416	271	920	840	230	160	1210	466	381	173	147	141

CAL YR 1979 TOTAL 889878 MEAN 2438 MAX 10400 MIN 127 CFSM 1.46 IN 19.86
WTR YR 1980 TOTAL 596159 MEAN 1629 MAX 8210 MIN 141 CFSM .98 IN 13.30

04228845 HONEOYE LAKE NEAR HONEOYE, NY

LOCATION.--Lat 42°45'44", long 77°30'21", Ontario County, Hydrologic Unit 04130003, on east shore of Honeoye Lake, at Trident Marina on East Lake Road, 1.9 mi (3.1 km) south of U.S. Highway 20A, and 2.0 mi (3.2 km) southeast of Honeoye.

DRAINAGE AREA.--41.1 mi^2 (106 km^2).

PERIOD OF RECORD.--July to December 1963. Occasional readings January to August 1964. October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. July 10, 1963 to Sept. 28, 1967, nonrecording gage and Sept. 29, 1967 to Sept. 30, 1969, recording gage at datum 800.35 ft (243.947 m) higher. Oct. 1, 1969 to Sept. 30, 1975, at datum 800.00 ft (243.840 m) higher.

REMARKS.--Area of water surface, 2.71 mi^2 (7.02 km^2).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 806.91 ft (245.946 m) June 23, 1972; minimum observed, 802.15 ft (244.495 m) present datum, Oct. 5, 1965, Oct. 1, 2, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 804.75 ft (245.288 m) Apr. 1; minimum, 802.81 ft (244.696 m) Sept. 29, 30.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	803.37	803.56	803.92	804.13	803.44	803.31	804.74	803.96	803.38	803.66	803.19	802.88
2	803.37	803.54	803.89	804.08	803.44	803.31	804.72	803.94	803.37	803.65	803.17	802.91
3	803.39	803.54	803.86	804.03	803.43	803.30	804.66	803.91	803.38	803.63	803.22	802.93
4	803.40	803.53	803.83	803.98	803.42	803.29	804.58	803.88	803.36	803.60	803.20	802.93
5	803.43	803.52	803.82	803.93	803.41	803.29	804.51	803.85	803.35	803.64	803.20	802.92
6	803.52	803.52	803.79	803.89	803.39	803.30	804.43	803.81	803.34	803.70	803.19	802.91
7	803.51	803.54	803.80	803.85	803.38	803.31	804.37	803.79	803.33	803.67	803.17	802.89
8	803.51	803.57	803.77	803.81	803.37	803.36	804.30	803.74	803.37	803.66	803.19	802.88
9	803.53	803.57	803.75	803.78	803.36	803.37	804.21	803.71	803.36	803.63	803.17	802.87
10	803.53	803.59	803.72	803.74	803.35	803.40	804.18	803.67	803.36	803.61	803.15	802.87
11	803.53	803.58	803.71	803.73	803.34	803.53	804.13	803.65	803.34	803.58	803.14	802.86
12	803.52	803.57	803.68	803.73	803.34	803.56	804.10	803.63	803.32	803.54	803.13	802.83
13	803.53	803.57	803.66	803.71	803.32	803.55	804.08	803.64	803.32	803.51	803.11	802.82
14	803.53	803.58	803.65	803.69	803.32	803.56	804.06	803.64	803.31	803.49	803.09	802.90
15	803.52	803.59	803.63	803.69	803.31	803.55	804.10	803.62	803.33	803.47	803.07	802.91
16	803.51	803.58	803.61	803.68	803.33	803.54	804.07	803.60	803.45	803.45	803.04	802.90
17	803.51	803.58	803.59	803.66	803.31	803.59	804.04	803.58	803.45	803.42	803.02	802.90
18	803.50	803.57	803.57	803.66	803.31	803.73	804.01	803.57	803.44	803.39	803.01	802.88
19	803.50	803.57	803.56	803.65	803.31	803.76	803.98	803.57	803.42	803.37	802.99	802.87
20	803.51	803.56	803.56	803.64	803.30	803.82	803.96	803.56	803.46	803.36	802.98	802.87
21	803.50	803.56	803.54	803.62	803.30	803.97	803.92	803.54	803.45	803.36	802.97	802.88
22	803.50	803.57	803.54	803.60	803.31	804.24	803.88	803.53	803.44	803.36	802.95	802.87
23	803.52	803.58	803.54	803.59	803.33	804.29	803.84	803.51	803.43	803.37	802.94	802.88
24	803.57	803.59	803.59	803.57	803.33	804.29	803.80	803.50	803.42	803.34	802.93	802.87
25	803.56	803.66	803.97	803.55	803.33	804.37	803.80	803.48	803.41	803.32	802.92	802.85
26	803.55	803.84	804.34	803.53	803.33	804.35	803.77	803.45	803.40	803.30	802.91	802.87
27	803.54	803.95	804.39	803.52	803.33	804.31	803.74	803.43	803.39	803.29	802.90	802.84
28	803.56	803.98	804.34	803.51	803.33	804.28	803.79	803.41	803.41	803.28	802.89	802.83
29	803.55	803.98	804.29	803.49	803.33	804.30	803.93	803.40	803.48	803.25	802.88	802.82
30	803.55	803.96	804.24	803.48	---	804.40	803.96	803.40	803.65	803.24	802.88	802.82
31	803.56	---	804.18	803.45	---	804.56	---	803.40	---	803.22	802.88	---
MEAN	803.51	803.63	803.82	803.71	803.35	803.77	804.12	803.62	803.40	803.46	803.05	802.88
MAX	803.57	803.98	804.39	804.13	803.44	804.56	804.74	803.96	803.65	803.70	803.22	802.93
MIN	803.37	803.52	803.54	803.45	803.30	803.29	803.74	803.40	803.31	803.22	802.88	802.82

CAL YR 1979 MEAN 803.48 MAX 804.68 MIN 802.95
WTR YR 1980 MEAN 803.53 MAX 804.74 MIN 802.82

04228919 HEMLOCK LAKE NEAR HEMLOCK, NY

LOCATION.--Lat 42°46'30", long 77°36'36", Livingston County, Hydrologic Unit 04130003, at Rochester Water Bureau filtration plant at north end of Hemlock Lake, 1.5 mi (2.4 km) south of Hemlock.

PERIOD OF RECORD.--Water years 1976 to current year.
CHEMICAL DATA: 1976-79 (b), 1980 (a).
MINOR ELEMENTS DATA: 1976-79 (b), 1980 (a).
RADIOCHEMICAL DATA: 1976-79 (b), 1980 (a).
PESTICIDE DATA: 1976-79 (b), 1980 (a).
ORGANIC DATA: OC--1976-79 (b), 1980 (a).
PCB--1976-79 (b), 1980 (a).
PCN--1976-79 (b), 1980 (a).
NUTRIENT DATA: 1976-79 (b), 1980 (a).

REMARKS.--Samples are collected from raw-water tap in filtration plant laboratory.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE SOURCE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
DEC 14...	1300	46	225	7.2	9.0	86	31	25	5.6	8.2
SEP 22...	1300	46	218	7.4	22.0	87	33	24	6.5	7.9

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)
DEC 14...	1.2	55	22	13	.1	1.8	--	110	.15	.00
SEP 22...	1.2	54	19	13	.1	.7	121	105	.05	.00

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
DEC 14...	.15	.03	.19	.22	.37	.01	50	0	0	3
SEP 22...	.05	.01	.23	.24	.29	.01	40	1	100	0

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
DEC 14...	20	0	26	170	43	0	30	<.1	--	1
SEP 22...	20	0	19	90	1	0	10	<.1	1	1

DATE	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)
DEC 14...	0	0	40	10	4.6	.00	.00	.0	.00
SEP 22...	0	0	30	10	2.6	.00	.00	.0	.00

04228919 HEMLOCK LAKE NEAR HEMLOCK, NY--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)
DEC								
14...	.00	.0	.00	.00	.00	.00	.00	.00
SEP								
22...	.00	.0	.00	.00	.00	.00	.00	.00

DATE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)
DEC									
14...	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP									
22...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
DEC								
14...	.00	.00	.00	0	.00	.00	.00	.00
SEP								
22...	.00	.00	.00	0	.00	.00	.00	.00

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RA-226, DIS-SOLVED, PLAN-CHET COUNT (PCI/L)	STRON-TIUM 90 DIS-SOLVED (PCI/L)
DEC										
14...	<1.4	<.4	<1.0	<.3	2.0	<.4	1.9	<.4	<.1	<.4
SEP										
22...	<2.5	<1.7	<1.7	<1.2	3.8	<.8	3.6	<.8	<.1	.5

04228950 CANADICE LAKE NEAR HEMLOCK, NY

04229000 CANADICE OUTLET NEAR HEMLOCK, NY

LOCATION.--Lake: Lat 42°44'27", long 77°34'20", Ontario County, Hydrologic Unit 04130003, at dam at outlet of Canadice Lake, 3.6 mi (5.8 km) upstream from point of diversion to Hemlock Lake, and 4 mi (6 km) southeast of Hemlock. Outlet: Lat 42°44'27", long 77°34'20", Ontario County, upstream from weir, 60 ft (18.3 m) downstream from dam.

DRAINAGE AREA.--12.4 mi² (32.1 km²).

PERIOD OF RECORD.--Lake: October 1970 to current year.
Outlet: April 1903 to current year. Prior to October 1966, published as "Canadice Lake Outlet."

REVISED RECORDS.--WSP 2112: Drainage area; 1967.

GAGE.--Nonrecording gage read once daily and whenever control gate is changed. Datum of gage is 1,093.00 ft (333.146 m) National Geodetic Vertical Datum of 1929 (furnished by city of Rochester).

REMARKS.--Outflow from Canadice Lake diverted into Hemlock Lake for Rochester water supply. Flow regulated by gates at dam and augmented by pumping. Discharge computed by weir formula and from pumping records. Intermittent flow over spillway is not monitored. Accuracy of adjusted record, as indicative of natural runoff, is therefore reduced.

COOPERATION.--Records furnished by Department of Public Works, City of Rochester.

AVERAGE DISCHARGE.--77 years, 11.4 ft³/s (0.323 m³/s), unadjusted.

MONTHEND ELEVATION, CONTENTS, AND MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCT. 1979 TO SEPT. 1980

	04228950 CANADICE LAKE			04229000 CANADICE OUTLET			
	* Elevation FT	Contents FT³	Change in contents FT³/S	Observed discharge MEAN	‡ Adjusted for change in contents in Canadice Lake MEAN	CFSM	IN.
October	1,092.02	283.56	- 1.40	0	- 0.52	-0.04	-0.05
November	1,093.01	311.28	+ 27.7	0	+10.7	+ .86	+ .96
December	1,095.20	375.20	+ 63.9	0	+23.9	+1.92	+2.22
CAL YR 1979			+ 70.4	6.87	+ 9.10	+ .73	+9.96
January	1,095.71	391.01	+ 15.8	0	+ 5.90	+ .48	+ .55
February	1,095.94	398.14	+ 7.13	0	+ 2.85	+ .23	+ .25
March	1,099.06	501.04	+103	0	+38.4	+3.10	+3.57
April	1,098.55	483.70	- 17.3	62.4	+55.7	+4.49	+5.01
May	1,094.88	365.40	-118	42.4	- 1.78	- .14	- .17
June	1,094.40	351.00	- 14.4	0	- 5.56	- .45	- .50
July	1,093.68	330.04	- 21.0	0	- 7.83	- .63	- .73
August	1,091.97	282.16	- 47.9	0	-17.9	-1.44	-1.66
September	1,091.49	268.72	- 13.4	0	- 5.19	- .42	- .47
WTR YR 1980			- 16.2	8.71	+ 8.19	+ .66	+8.99

* Elevation at 2400 hours on last day of month.

‡ Adjustments by Geological Survey. Negative figures indicate that natural losses from Canadice Lake exceeded inflow or that unmonitored spillage occurred.

NOTE.--All figures of contents expressed in millions.

04229500 HONEOYE CREEK AT HONEOYE FALLS, NY

LOCATION.--Lat 42°57'24", long 77°35'21", Monroe County, Hydrologic Unit 04130003, on right bank 25 ft (8 m) downstream from bridge on State Highway 65 at Honeoye Falls, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--195 mi^2 (505 km^2).

PERIOD OF RECORD.--October 1945 to September 1970, October 1972 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.00 ft (185.928 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1970, water-stage recorder at same site at datum 609.76 ft (185.855 m) NGVD.

REMARKS.--Records poor. Outlet of Honeoye Lake not controlled (see station 04228845). Some diversion from and regulation by Hemlock and Canadice Lakes for water supply of city of Rochester. Diurnal fluctuation at low flow caused by mills upstream from station. Prior to 1967 water year, published monthly figures adjusted for change in contents in, and diversion from, Hemlock and Canadice Lakes. During low-water periods the village of Honeoye Falls pumps water from two deep wells with maximum pumping capacity of 600 gal/min (1.33 ft^3/s or 0.038 m^3/s). This pumped water enters creek upstream from gage.

AVERAGE DISCHARGE.--33 years (1946-70, 1973-80), 123 ft^3/s (3.483 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,630 ft^3/s (131 m^3/s) Mar. 28, 1950, gage height, 6.42 ft (1.957 m), datum then in use, from rating curve extended above 2,100 ft^3/s (59.5 m^3/s); minimum, 0.06 ft^3/s (0.002 m^3/s) Aug. 28, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of about 6.3 ft (1.92 m) current datum, discharge, about 6,600 ft^3/s (187 m^3/s), from rating curve extended above 2,700 ft^3/s (76.5 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,620 ft^3/s (45.9 m^3/s) Dec. 26, gage height, 3.78 ft (1.152 m); minimum, 2.0 ft^3/s (0.057 m^3/s) Sept. 1, gage height, 0.24 ft (0.073 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	44	146	222	37	45	874	273	35	153	13	2.8
2	52	48	131	200	35	37	714	216	38	102	14	7.3
3	54	57	119	176	33	30	501	181	34	87	14	3.3
4	50	54	119	115	31	40	401	156	33	66	14	3.1
5	100	49	113	110	30	52	378	136	32	50	13	3.1
6	80	44	117	110	29	110	323	122	28	85	12	3.1
7	68	48	128	110	27	180	280	115	26	129	11	3.1
8	52	72	141	100	27	120	252	107	46	77	9.1	2.9
9	40	80	124	100	26	150	235	98	61	61	9.4	2.8
10	46	74	106	100	26	220	232	93	54	53	8.7	2.8
11	46	79	100	110	26	600	232	87	48	44	7.9	2.8
12	40	71	96	120	25	400	213	85	38	39	6.9	2.6
13	37	62	89	130	25	150	235	89	32	34	6.3	2.4
14	48	61	82	140	25	110	229	113	27	31	5.4	2.4
15	57	65	71	150	25	95	288	115	28	28	6.0	2.8
16	49	68	68	150	24	88	307	98	63	26	6.9	2.8
17	42	66	76	120	24	280	242	84	97	23	5.7	3.3
18	38	63	82	120	23	559	213	77	57	21	4.6	2.9
19	36	59	80	120	24	378	194	87	39	19	3.7	2.8
20	33	55	90	100	28	369	173	93	41	17	3.7	2.8
21	30	53	100	100	40	391	159	79	52	19	3.5	2.8
22	29	52	110	100	58	639	143	71	49	22	3.5	2.8
23	28	53	130	70	150	476	129	63	38	22	3.3	2.9
24	58	57	187	58	120	428	122	57	31	26	3.1	2.8
25	80	74	882	56	86	727	122	52	26	21	2.9	2.6
26	62	194	1480	58	78	559	124	47	26	17	2.8	2.6
27	49	348	838	64	80	382	113	41	25	15	2.6	2.6
28	49	262	442	58	74	335	156	38	26	16	2.6	2.6
29	61	194	327	52	58	382	496	34	74	15	2.4	2.4
30	58	164	292	45	---	651	382	32	117	15	2.3	2.4
31	49	---	255	40	---	633	---	32	---	14	2.3	---
TOTAL	1573	2670	7121	3304	1294	9616	8462	2971	1321	1347	206.6	88.4
MEAN	50.7	89.0	230	107	44.6	310	282	95.8	44.0	43.5	6.66	2.95
MAX	100	348	1480	222	150	727	874	273	117	153	14	7.3
MIN	28	44	68	40	23	30	113	32	25	14	2.3	2.4

CAL YR 1979 TOTAL 63346.2 MEAN 174 MAX 2450 MIN 4.8 CFSM .89 IN 12.08
WTR YR 1980 TOTAL 39974.0 MEAN 109 MAX 1480 MIN 2.3 CFSM .56 IN 7.63

04230380 OATKA CREEK AT WARSAW

LOCATION.--Lat 42°44'39", long 78°08'16", Wyoming County, Hydrologic Unit 04130003, on right bank 400 ft (122 m) downstream from bridge on Court Street, Warsaw.

DRAINAGE AREA.--41.9 mi^2 (109 km^2).

PERIOD OF RECORD.--December 1963 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 987.15 ft (300.883 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--16 years (1964-80), 54.5 ft^3/s (1.543 m^3/s), 17.66 in/yr (449 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,010 ft^3/s (114 m^3/s) June 23, 1972, gage height, 9.75 ft (2.972 m), from rating curve extended above 1,770 ft^3/s (50.1 m^3/s) on basis of slope-area measurement of peak discharge; minimum, 0.90 ft^3/s (0.025 m^3/s) Aug. 1, 1965; minimum gage height, 1.09 ft (0.332 m) July 22, 23, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 690 ft^3/s (19.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 25	1530	*1,150	32.6	*4.73	1.442	Mar. 21	1830	870	24.6	4.12	1.256

Minimum discharge, 2.1 ft^3/s (0.059 m^3/s) Aug. 27, 30, 31, Sept. 1, gage height, 1.40 ft (0.427 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	22	66	60	23	22	237	52	7.9	47	3.7	3.7
2	8.4	22	56	52	22	20	170	43	7.9	28	4.4	41
3	7.9	22	71	47	22	19	126	33	11	20	16	26
4	7.8	19	47	44	21	18	144	25	11	14	10	10
5	32	17	71	41	21	19	121	20	6.9	121	4.4	6.0
6	84	16	158	40	20	20	87	17	6.0	89	26	4.4
7	49	33	121	38	20	22	66	16	7.9	41	22	3.7
8	43	32	123	36	19	23	59	14	71	30	23	3.1
9	68	28	61	35	19	25	79	14	35	25	9.0	4.4
10	47	153	41	34	18	90	59	11	26	20	5.2	11
11	37	68	59	70	18	167	47	11	20	17	7.9	6.0
12	35	47	63	200	18	108	56	11	13	13	11	4.4
13	105	41	47	400	18	95	68	28	9.0	10	7.9	4.4
14	68	45	33	190	18	47	89	44	6.9	7.9	6.9	144
15	52	45	30	66	18	47	128	30	7.9	6.9	16	94
16	39	49	25	58	18	71	80	18	30	9.0	9.0	35
17	26	39	24	52	18	219	58	12	16	6.9	6.9	32
18	23	43	23	47	18	341	50	21	9.0	6.0	6.0	26
19	22	35	22	43	18	203	43	39	6.0	5.2	6.0	19
20	39	32	21	39	18	270	37	28	23	6.0	4.4	14
21	30	30	23	35	20	517	32	23	52	5.2	3.7	13
22	22	30	29	33	25	203	26	20	22	10	3.7	14
23	25	30	95	31	45	144	23	16	11	23	5.2	26
24	39	32	185	30	39	170	21	13	6.9	10	4.4	17
25	33	35	820	29	34	215	20	11	4.4	6.0	3.7	13
26	25	56	277	28	29	123	19	9.0	3.7	4.4	3.1	28
27	20	49	142	27	27	134	18	7.9	2.6	5.2	2.6	17
28	39	54	108	26	25	167	116	7.9	7.9	9.0	2.6	13
29	43	66	92	25	23	260	134	7.9	52	7.9	3.1	10
30	28	66	80	25	---	241	80	9.0	150	6.0	2.6	9.0
31	25	---	68	24	---	374	---	11	---	4.4	2.6	---
TOTAL	1130.4	1256	3081	1905	652	4394	2293	622.7	643.9	614.0	243.0	652.1
MEAN	36.5	41.9	99.4	61.5	22.5	142	76.4	20.1	21.5	19.8	7.84	21.7
MAX	105	153	820	400	45	517	237	52	150	121	26	144
MIN	7.8	16	21	24	18	18	18	7.9	2.6	4.4	2.6	3.1
CFSM	.87	1.00	2.37	1.47	.54	3.39	1.82	.48	.51	.47	.19	.52
IN.	1.00	1.12	2.74	1.69	.58	3.90	2.04	.55	.57	.55	.22	.58

CAL YR 1979 TOTAL 27482.0 MEAN 75.3 MAX 1600 MIN 1.3 CFSM 1.80 IN 24.40
WTR YR 1980 TOTAL 17487.1 MEAN 47.8 MAX 820 MIN 2.6 CFSM 1.14 IN 15.53

04230500 OATKA CREEK AT GARBUTT, NY

LOCATION.--Lat 43°00'36", long 77°47'30", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft (12 m) downstream from bridge on Union Street in Garbutt, 1.5 mi (2.4 km) west of Scottsville, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--204 mi^2 (528 km^2).

PERIOD OF RECORD.--October 1945 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1971: 1960(M).

GAGE.--Water-stage recorder. Datum of gage is 560.86 ft (170.950 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--35 years, 213 ft^3/s (6.032 m^3/s), 14.18 in/yr (360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft^3/s (200 m^3/s) Mar. 31, 1960, gage height, 8.64 ft (2.633 m); minimum, 3.3 ft^3/s (0.093 m^3/s) Sept. 11, 12, 1958; minimum gage height, 1.88 ft (0.573 m) June 19, 1959, result of regulation; minimum daily discharge, 13 ft^3/s (0.37 m^3/s) Oct. 30 to Nov. 1, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft^3/s (42.5 m^3/s) and maximum (*):

		Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Dec. 27	0230	*2,200	62.3	*5.85	1.783

Minimum discharge, 36 ft^3/s (1.020 m^3/s) Aug. 15, gage height, 2.33 ft (0.710 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	120	152	334	106	100	1250	364	86	203	48	43
2	57	112	148	303	104	93	1160	278	93	205	49	54
3	60	107	135	274	97	86	820	235	93	166	51	46
4	58	103	136	244	97	79	650	207	87	120	49	41
5	62	100	132	205	93	80	584	185	82	102	47	44
6	89	95	139	188	90	90	534	171	80	99	52	40
7	150	100	212	185	88	104	453	159	78	174	51	40
8	131	119	245	173	86	106	383	151	277	172	47	40
9	132	137	237	167	84	107	348	143	231	116	51	41
10	138	169	194	149	83	143	355	138	203	95	49	41
11	149	263	159	167	82	539	367	133	163	85	50	40
12	122	256	158	312	81	509	312	130	135	76	46	38
13	120	189	165	278	80	405	291	136	117	69	46	40
14	170	163	162	325	80	262	315	160	104	65	45	43
15	206	156	137	300	78	193	358	189	100	62	44	43
16	159	154	122	260	80	164	420	170	115	60	43	98
17	144	158	106	230	75	303	312	146	119	58	43	84
18	123	146	100	280	75	799	259	146	114	57	43	54
19	113	136	94	220	77	876	254	150	98	56	43	43
20	127	131	96	190	80	969	231	159	102	54	41	41
21	159	122	99	170	84	817	214	145	114	55	41	41
22	154	118	103	150	98	1130	198	131	124	56	41	40
23	129	115	117	140	164	1100	184	122	117	56	41	41
24	122	114	240	129	199	789	175	112	96	54	40	40
25	137	113	812	135	168	898	167	105	84	57	40	40
26	139	118	1820	132	134	905	159	98	77	56	40	43
27	126	130	1850	129	116	730	154	92	80	53	48	44
28	121	147	964	124	109	625	192	87	99	52	38	40
29	129	136	570	119	102	642	384	83	237	52	38	38
30	147	152	455	115	---	795	446	82	214	51	38	38
31	134	---	392	109	---	946	---	86	---	49	40	---
TOTAL	3864	4179	10451	6236	2890	15383	11929	4693	3719	2685	1375	1359
MEAN	125	139	337	201	99.7	496	398	151	124	86.6	44.4	45.3
MAX	206	263	1850	334	199	1130	1250	364	277	205	52	98
MIN	57	95	94	109	75	79	154	82	77	49	38	38
CFSM	379	421	1021	609	302	1503	1206	458	376	262	135	137
IN.	434.26	469.66	1174.55	700.84	324.80	1728.84	1340.66	527.43	417.97	301.76	154.53	152.73

CAL YR 1979 TOTAL 104610 MEAN 287 MAX 3620 MIN 34 CFSM 69.7 IN 756.77
WTR YR 1980 TOTAL 68763 MEAN 188 MAX 1850 MIN 38 CFSM 69.7 IN 728.04

04230650 GENESEE RIVER AT BALLANTYNE BRIDGE, NEAR MORTIMER, NY

LOCATION.--Lat 43°05'26", long 77°40'52", Monroe County, Hydrologic Unit 04130003, on right bank 400 ft (120 m) upstream from Ballantyne Bridge on State Highway 252, 1.6 mi (2.6 km) west of Mortimer, and 2.8 mi (4.5 km) upstream from Erie (Barge) Canal.

DRAINAGE AREA.--2,206 m^2 (5,714 km^2).

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft (152.400 m) National Geodetic Vertical Datum of 1929.

REMARKS.--River regulated at high stages by Mount Morris Lake (see station 04224000). River regulated for operation of Erie (Barge) Canal and downstream powerplants.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 19.33 ft (5.892 m) Mar. 5, 1976; minimum, 8.20 ft (2.499 m) Nov. 9, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 16.16 ft (4.926 m) Dec. 26; minimum, 8.20 ft (2.499 m) Nov. 9.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.12	12.12	12.06	13.80	12.12	11.62	15.09	12.93	11.90	12.13	12.04	11.83
2	11.93	12.16	12.09	13.72	11.95	11.56	14.60	12.82	12.07	12.20	12.05	11.95
3	11.77	12.06	11.93	13.34	11.97	11.54	14.35	12.62	11.87	12.12	11.80	12.15
4	11.97	11.98	12.02	12.70	11.94	11.57	14.19	12.51	12.03	12.03	12.05	12.04
5	11.87	11.89	12.45	11.95	11.97	11.60	14.47	12.31	12.03	11.95	12.01	11.95
6	11.95	11.98	11.83	12.15	11.77	11.66	14.55	12.06	12.11	12.09	12.03	11.93
7	12.19	12.03	12.03	12.21	11.79	11.80	14.58	12.21	11.82	12.07	11.89	11.83
8	11.99	11.81	12.73	12.17	11.92	11.79	14.53	12.27	12.34	11.97	11.84	11.85
9	11.96	8.79	12.86	11.81	11.90	11.99	14.14	12.15	12.08	11.66	12.13	11.93
10	11.93	10.55	12.43	12.16	11.96	12.37	14.08	12.12	12.13	12.04	12.01	11.93
11	12.07	12.19	12.06	12.18	11.76	13.41	14.04	12.29	12.05	12.02	11.94	11.90
12	11.94	12.16	11.94	12.13	11.85	13.30	13.93	12.11	12.04	11.98	12.00	11.85
13	12.13	12.15	11.71	12.37	12.12	12.61	13.40	12.15	12.12	12.16	12.01	11.78
14	12.10	12.01	11.47	12.44	12.08	12.85	13.07	12.21	12.10	12.12	12.19	11.96
15	12.11	11.97	12.16	12.18	12.06	12.72	13.20	12.34	11.90	12.11	11.99	12.13
16	11.87	12.02	11.94	12.35	11.97	12.09	13.44	12.22	12.05	12.01	12.03	12.03
17	12.02	11.84	10.90	12.25	11.87	12.36	13.22	11.96	12.10	11.98	12.02	11.86
18	12.46	12.11	10.09	12.00	11.99	13.63	13.05	11.91	11.92	11.99	11.99	11.99
19	12.43	12.10	11.00	12.11	12.01	13.27	12.94	12.06	11.61	11.93	11.99	12.04
20	12.40	12.20	11.82	12.03	12.00	13.56	12.73	12.16	10.71	11.88	11.96	11.97
21	12.24	12.14	11.91	11.85	11.76	13.91	12.42	12.08	11.69	11.85	11.87	11.88
22	12.22	12.00	11.78	12.11	12.03	14.49	12.26	12.04	11.99	11.94	11.87	11.88
23	12.20	12.00	11.83	11.95	11.95	14.21	12.31	12.13	11.97	12.01	11.80	11.75
24	12.00	12.11	11.24	11.63	12.20	13.94	12.24	12.12	11.84	11.94	11.75	11.99
25	12.04	12.00	12.86	11.85	12.17	14.75	12.21	12.07	11.90	11.95	11.76	12.08
26	12.07	11.92	15.88	11.83	11.75	14.65	12.22	11.99	11.90	11.94	11.80	11.99
27	12.14	11.74	14.68	12.20	11.61	14.17	12.23	11.92	11.90	11.96	11.82	11.84
28	11.94	11.03	13.61	12.18	11.74	14.39	12.23	11.98	11.91	12.00	11.74	11.93
29	12.06	9.73	13.44	11.90	11.70	14.33	12.71	12.11	12.08	12.08	11.75	12.12
30	11.85	11.64	13.65	11.90	---	14.75	13.29	11.96	12.13	12.11	11.82	12.07
31	11.98	---	13.90	11.94	---	14.70	---	11.86	---	12.04	11.86	---
MEAN	12.06	11.75	12.33	12.24	11.93	13.08	13.39	12.18	11.94	12.01	11.93	11.95
MAX	12.46	12.20	15.88	13.80	12.20	14.75	15.09	12.93	12.34	12.20	12.19	12.15
MIN	11.77	8.79	10.09	11.63	11.61	11.54	12.21	11.86	10.71	11.66	11.74	11.75

CAL YR 1979 MEAN 12.51 MAX 18.58 MIN 8.79
WTR YR 1980 MEAN 12.23 MAX 15.88 MIN 8.79

04231000 BLACK CREEK AT CHURCHVILLE, NY

LOCATION.--Lat 43°06'02", long 77°52'57", Monroe County, Hydrologic Unit 04130003, on right bank at east end of Carrol Street in Churchville, 100 ft (30 m) downstream from main-line tracks of Penn Central Transportation Co., and 0.3 mi (0.5 km) downstream from Black Creek Dam.

DRAINAGE AREA.--123 mi^2 (319 km^2).

PERIOD OF RECORD.--October 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 551.88 ft (168.213 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Prior to May 1952, small diversion by Penn Central Transportation Co. and slight regulation by pumping operations upstream from station.

AVERAGE DISCHARGE.--35 years, 115 ft^3/s (3.257 m^3/s), 12.70 in/yr (323 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft^3/s (138 m^3/s) Mar. 31, 1960, gage height, 9.44 ft (2.877 m); minimum, 0.22 ft^3/s (0.006 m^3/s) Aug. 19, 1970; minimum gage height, 0.93 ft (0.283 m) Aug. 5-7, Sept. 15, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft^3/s (22.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 27	0400	*1,380	39.1	*5.73	1.747	Mar. 22	2230	858	24.3	4.52	1.378

Minimum discharge, 8.8 ft^3/s (0.249 m^3/s) Aug. 28, 29, 30, gage height, 1.30 ft (0.396 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	35	47	166	32	82	406	203	68	143	26	16
2	19	33	46	143	30	58	428	145	90	94	21	42
3	22	35	38	124	28	51	319	116	97	83	49	64
4	20	33	47	82	27	30	261	97	87	73	114	47
5	28	30	47	80	26	21	259	85	69	56	75	30
6	55	29	55	74	25	23	244	77	58	47	57	22
7	73	34	67	67	23	38	197	74	119	39	53	16
8	64	44	68	59	22	58	158	71	550	36	40	14
9	57	51	68	53	21	73	143	68	534	38	31	16
10	62	68	61	47	21	87	143	65	529	35	24	16
11	57	92	55	58	21	147	145	65	339	31	22	16
12	50	103	53	84	21	252	131	65	188	26	21	12
13	57	88	55	98	21	364	122	69	117	24	18	12
14	74	71	54	98	21	197	129	82	82	22	18	21
15	72	65	47	95	21	133	154	85	67	21	27	28
16	61	61	45	85	22	126	180	74	66	22	20	26
17	51	58	37	81	21	134	156	62	66	24	16	25
18	42	55	33	98	23	295	129	77	56	22	15	22
19	40	53	35	116	25	594	116	108	46	19	15	20
20	41	58	31	104	28	550	103	98	59	18	14	18
21	53	50	32	81	35	583	88	82	91	20	13	18
22	71	49	34	65	54	773	78	69	102	25	12	20
23	62	50	62	82	90	761	73	50	79	34	12	32
24	51	53	131	74	122	546	69	40	56	27	12	29
25	49	54	425	59	127	586	68	37	47	21	11	32
26	47	58	1000	50	106	716	65	35	46	18	11	31
27	42	58	1260	43	94	511	65	35	76	18	10	28
28	44	59	677	41	87	376	108	32	106	34	9.0	25
29	45	55	361	38	87	349	219	30	136	47	9.7	18
30	42	51	249	35	---	367	261	30	164	43	11	20
31	38	---	197	33	---	400	---	40	---	31	12	---
TOTAL	1510	1633	5417	2413	1281	9281	5017	2266	4190	1191	798.7	736
MEAN	48.7	54.4	175	77.8	44.2	299	167	73.1	140	38.4	25.8	24.5
MAX	74	103	1260	166	127	773	428	203	550	143	114	64
MIN	19	29	31	33	21	21	65	30	46	18	9.0	12
CFSM	.40	.44	1.42	.63	.36	2.43	1.36	.59	1.14	.31	.21	.20
IN.	.46	.49	1.64	.73	.39	2.81	1.52	.69	1.27	.36	.24	.22

CAL YR 1979 TOTAL 57459.3 MEAN 157 MAX 2590 MIN 4.7 CFSM 1.28 IN 17.38
WTR YR 1980 TOTAL 35733.7 MEAN 97.6 MAX 1260 MIN 9.0 CFSM .79 IN 10.81

04232000 GENESEE RIVER AT ROCHESTER, NY

LOCATION.--Lat 43°10'50", long 77°37'40", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft (12 m) downstream from Rochester Gas and Electric Corp. plant 5, 100 ft (30 m) upstream from bridge on Driving Park Avenue in Rochester, and 6.1 mi (9.8 km) upstream from mouth.

DRAINAGE AREA.--2,457 mi^2 (6,364 km^2).

PERIOD OF RECORD.--April 1904 to September 1918, December 1919 to current year. Published as "at Driving Park Avenue," 1919-68.

REVISED RECORDS.--WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.24 ft (75.054 m) National Geodetic Vertical Datum of 1929 (247.00 ft or 75.286 m, Barge Canal datum). April 1904 to December 1910, nonrecording gage and December 1910 to September 1918, water-stage recorder at site 5 mi (8 km) upstream at datum 506.85 ft (154.488 m), Barge Canal datum. December 1919 to Apr. 4, 1927, water-stage recorder in plant 5, and Apr. 4, 1927 to June 19, 1956, at present site at datum 250.00 ft (76.200 m), Barge Canal datum.

REMARKS.--Records fair. Extensive diurnal fluctuation caused by powerplants upstream from station. New York State Erie (Barge) Canal crosses river 5.4 mi (8.7 km) upstream from station. Water diverted by the canal from Lake Erie is discharged into river from the west, the canal again diverting a smaller amount of water from river to the east. Additional regulation is provided by Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--73 years, (1905-18, 1920-80), 2,781 ft^3/s (78.76 m^3/s), 15.37 in/yr (390 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,300 ft^3/s (1,370 m^3/s) Mar. 30, 1916, gage height, 15.3 ft (4.66 m) site and datum then in use; maximum at present site, 34,400 ft^3/s (974 m^3/s) Mar. 19, 1942; maximum gage height, 17.08 ft (5.206 m) Apr. 2, 1940, present datum; minimum discharge, less than 10 ft^3/s (0.28 m^3/s), occurred during low-water periods when powerplant was shut down; minimum daily, 91 ft^3/s (2.58 m^3/s) Jan. 9, 29, Feb. 1, 8, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Discharge on Mar. 18, 1865, was about 54,000 ft^3/s (1,530 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,300 ft^3/s (698 m^3/s) Mar. 24, gage height, 14.49 ft (4.417 m), result of regulation; minimum daily discharge, 299 ft^3/s (8.47 m^3/s) Aug. 1, result of regulation during period of backwater from Lake Ontario; minimum gage height, 0.95 ft (0.290 m) Aug. 1, result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1330	2820	3920	7340	1170	826	11800	4720	1030	1960	299	1180
2	1490	2890	3140	6660	1340	781	10900	4390	1240	1960	624	1610
3	1310	2930	3020	5860	1190	737	10100	3980	1310	1730	1430	1060
4	1120	2830	3290	4610	1190	764	9540	3830	952	1270	1160	1390
5	1330	2980	4070	3970	1280	805	10300	2980	899	1380	1970	1390
6	1440	3050	4770	3190	1210	848	10400	2220	1520	1180	1820	1080
7	2290	3150	4770	2660	1100	963	10300	2450	1660	1620	1400	996
8	2180	3690	4700	2340	1080	1310	9860	2610	3400	1830	1240	951
9	1850	4260	4780	2050	1110	1690	8570	2510	2980	1500	1040	934
10	1860	2840	4620	1490	1110	2690	8240	1810	2440	947	1590	934
11	1920	3570	3510	2080	1240	6160	7960	1990	2420	1360	1260	911
12	1750	4410	3200	2540	940	5530	7630	2110	1900	899	1320	890
13	1520	4240	2550	2810	1080	4490	6810	1820	1670	743	1240	893
14	1730	4340	2000	3640	1110	4170	5700	2100	1500	836	1140	1070
15	2040	4250	2280	3510	1110	4270	5860	2530	1440	591	1400	931
16	1860	4360	2140	3280	1120	3890	6120	2750	1530	579	1000	1270
17	2440	4210	2460	3130	1120	4900	5680	2360	1800	447	992	1300
18	3290	4440	1180	3210	980	7690	5100	2290	2360	439	1100	1210
19	4130	4410	996	3110	1070	6560	4560	2060	2210	432	1020	1030
20	4480	4710	1410	3010	1160	6810	4400	2060	2090	447	1000	1020
21	4330	4630	1860	2420	1170	8480	4300	2070	1230	451	986	1020
22	4100	4470	1820	2060	1280	11700	3560	1910	1530	523	986	1370
23	3560	4440	2280	2180	1630	10600	2810	1580	1690	454	986	1350
24	2670	4000	3230	1450	2100	9950	2280	1620	1320	462	931	1170
25	2450	3780	8470	1320	1830	11800	2230	1430	2810	376	936	1080
26	2430	4580	15200	1260	1460	11100	2090	1340	1820	382	920	1290
27	2480	5160	11900	1490	1050	9720	1980	1380	1140	376	920	1240
28	2660	5490	8210	1650	927	9810	2640	974	1020	400	920	2430
29	2490	5100	7210	1650	922	10000	4420	1120	1520	376	883	3230
30	2730	4740	7220	1480	---	10900	5440	1060	1590	359	872	2780
31	2690	---	7620	1250	---	10900	---	1210	---	365	883	---
TOTAL	73950	120770	137826	88700	35079	180844	191580	69264	52021	26674	34268	39010
MEAN	2385	4026	4446	2861	1210	5834	6386	2234	1734	860	1105	1300
MAX	4480	5490	15200	7340	2100	11800	11800	4720	3400	1960	1970	3230
MIN	1120	2820	996	1250	922	737	1980	974	899	359	299	890

CAL YR 1979 TOTAL 1374442 MEAN 3766 MAX 20900 MIN 502
WTR YR 1980 TOTAL 1049986 MEAN 2869 MAX 15200 MIN 299

04232006 GENESEE RIVER AT CHARLOTTE DOCKS, ROCHESTER, NY
(National stream-quality accounting network station)

LOCATION.--Lat 43°13'26", long 77°36'59", Monroe County, Hydrologic Unit 04130003, at Charlotte Docks, at the Rochester Cement Corp., in Rochester, 0.4 mi (0.6 km) upstream from Rattlesnake Point, 1.6 mi (2.6 km) upstream from Stutson Street Bridge, and 3.9 mi (6.3 km) downstream from gaging station (04232000) at Rochester.

DRAINAGE AREA.--2,457 mi^2 (6,364 km^2) at station 04232000.

PERIOD OF RECORD.--Water years 1971 to current year.
CHEMICAL DATA: 1971-72 (a), 1974 (b), 1975-80 (c).
MINOR ELEMENT DATA: 1971-73 (a), 1974-80 (b).
ORGANIC DATA: OC--1974 (a), 1975 (b), 1977 (b), 1978-80 (c).
NUTRIENT DATA: 1971 (a), 1974 (b), 1975-80 (c).
BIOLOGICAL DATA:
Bacteria--1974 (b), 1975-80 (c).
Phytoplankton--1974 (b), 1975-77 (c), 1978-80 (b).
Periphyton--1975-80 (b).
SEDIMENT DATA: 1974 (b), 1975-80 (c).

REMARKS.--Water-discharge data are based on records for station 04232000 Genesee River at Rochester.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV											
02...	1100	2800	600	7.4	9.5	6.0	10.9	96	K190	490	210
MAY											
07...	1200	2700	520	7.4	17.0	33	6.9	73	14000	2700	170
JUN											
04...	1100	680	775	7.5	20.0	.25	5.9	65	K1300	100	270
25...	1200	2400	710	8.0	22.0	7.0	6.8	77	K380	K5	240
JUL											
17...	1100	620	690	8.2	25.0	5.5	6.4	78	K52	K12	220
AUG											
07...	1200	1500	1100	7.6	31.0	8.8	7.0	86	K15000	68	300
SEP											
05...	1000	1300	935	7.2	25.0	.30	6.7	80	4400	K80	200

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV											
02...	78	62	13	47	3.6	130	74	75	.2	4.0	396
MAY											
07...	73	51	11	32	2.6	100	66	45	.1	2.4	322
JUN											
04...	130	80	16	54	3.7	140	120	79	.2	1.3	536
25...	100	72	15	50	3.9	140	92	74	.2	2.2	489
JUL											
17...	86	65	13	52	4.6	130	88	82	.2	1.8	464
AUG											
07...	160	90	18	100	4.7	140	150	170	.2	3.8	703
SEP											
05...	86	52	16	78	4.1	110	100	130	.2	1.8	504

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)
NOV											
02...	360	.60	.59	.21	.08	.89	.65	1.1	.73	1.7	1.3
MAY											
07...	273	.65	.57	.69	.61	.81	.49	1.5	1.1	2.2	1.7
JUN											
04...	441	.58	.59	.85	.79	.65	.51	1.5	1.3	2.1	1.9
25...	397	.91	.89	.45	.41	.75	.89	1.2	1.3	2.1	2.2
JUL											
17...	387	.50	.51	.35	.35	.95	.85	1.3	1.2	1.8	1.7
AUG											
07...	623	.57	.55	.48	.40	.40	.59	.88	.99	1.5	1.5
SEP											
05...	451	.53	.54	.53	.44	.67	.25	1.2	.69	1.7	1.2

K Results based on colony count outside the acceptable range (non-ideal colony count).

04232006 GENESEE RIVER AT CHARLOTTE DOCKS, ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
NOV											
02...	.87	.56	--	--	--	--	--	--	--	--	--
MAY											
07...	.08	.04	--	--	--	--	--	--	--	--	--
JUN											
04...	.07	.09	2	2	50	60	3	2	10	<10	0
25...	.09	.04	--	--	--	--	--	--	--	--	--
JUL											
17...	.11	.05	3	2	<50	60	2	3	10	<10	--
AUG											
07...	.15	.10	--	--	--	--	--	--	--	--	--
SEP											
05...	.16	.07	1	1	100	100	0	1	50	<10	0

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
NOV											
02...	--	--	--	--	--	--	--	--	--	--	--
MAY											
07...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	0	11	6	950	60	21	3	100	50	.3	<.1
25...	--	--	--	--	--	--	--	--	--	--	--
JUL											
17...	0	12	9	700	110	29	8	90	70	.1	<.1
AUG											
07...	--	--	--	--	--	--	--	--	--	--	--
SEP											
05...	0	9	5	680	60	9	3	90	40	.1	.1

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
NOV											
02...	--	--	--	--	--	--	--	--	9.0	--	--
MAY											
07...	--	--	--	--	1	--	--	--	4.3	--	--
JUN											
04...	4	2	0	0	0	0	40	10	--	6.9	5.0
25...	--	--	--	--	2	--	--	--	7.4	--	--
JUL											
17...	8	0	0	0	0	0	90	80	--	8.0	--
AUG											
07...	--	--	--	--	2	--	--	--	3.4	--	--
SEP											
05...	11	6	0	0	4	0	40	10	--	19	1.3

04232006 GENESEE RIVER AT CHARLOTTE DOCKS, ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE, WATER (DEG C)
NOV					
02...	1005	40	3.0	605	9.5
02...	1010	40	10	595	9.5
02...	1015	40	15	600	9.5
02...	1020	40	20	600	9.5
02...	1025	150	3.0	600	9.5
02...	1030	150	8.0	605	9.5
02...	1035	150	12	630	9.5
02...	1040	260	3.0	635	9.5
02...	1045	260	7.0	635	9.5
02...	1050	260	10	635	9.5
MAY					
07...	1105	40	3.0	519	17.0
07...	1110	40	11	522	17.0
07...	1115	40	19	521	17.0
07...	1145	150	3.0	517	17.5
07...	1150	150	9.0	520	17.0
07...	1155	150	14	522	17.0
07...	1220	260	3.0	512	17.5
07...	1225	260	6.5	515	17.5
07...	1230	260	10	518	17.5
JUN					
04...	1030	40	3.0	775	20.5
04...	1035	40	10	775	20.0
04...	1040	40	3.0	680	23.0
04...	1045	40	10	700	22.0
04...	1050	40	15	710	22.0
04...	1055	40	20	710	21.5
04...	1100	40	3.0	775	20.0
04...	1105	40	10	690	26.0
04...	1110	40	16	610	24.5
04...	1115	150	3.0	700	22.5
04...	1120	40	22	560	23.5
04...	1125	150	3.0	725	26.0
JUN					
04...	1130	150	7.0	725	25.5
04...	1135	150	11	720	25.5
04...	1140	150	15	680	25.0
04...	1145	260	3.0	730	25.5
04...	1150	260	6.0	720	25.5
04...	1155	260	9.0	720	25.5
04...	1200	260	12	690	25.0
AUG					
07...	1000	50	3.0	1000	26.5
07...	1005	50	10	1000	26.0
07...	1010	50	15	1000	26.0
07...	1015	50	20	1000	25.5
07...	1040	150	3.0	1080	26.0
07...	1045	150	8.0	1100	26.0
07...	1050	150	12	1080	25.5
07...	1055	150	16	1050	25.5
07...	1110	250	3.0	1100	26.0
07...	1115	250	6.0	1100	26.0
07...	1120	250	9.0	1100	26.0
07...	1125	250	12	1100	26.0
SEP					
05...	0940	50	3.0	930	25.0
05...	0945	50	10	930	25.0
05...	0950	50	15	929	25.0
05...	0955	50	20	929	25.0
05...	1010	150	3.0	926	25.0
05...	1015	150	7.0	935	25.0
05...	1020	150	11	936	25.0
05...	1025	150	15	933	25.0
05...	1040	250	3.0	938	25.0
05...	1045	250	6.0	935	25.0
05...	1050	250	9.0	939	25.0
05...	1055	250	12	936	25.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (FT^3/S)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
NOV				
02...	1100	2800	22	166
MAY				
07...	1200	2700	46	335
JUN				
04...	1100	680	17	31
25...	1200	2400	16	104

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
JUL				
17...	1100	620	16	27
SEP				
05...	1000	1300	14	49

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2) Dry weight	Biomass (g/m^2) Ash weight	Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
May 7 to June 4	28	20.9	16.5	4.70	1.28	Polyethylene strip
June 25 to July 17	22	20.2	25.1	37.3	20.2	Polyethylene strip
July 17 to Aug. 7	21	23.7	18.3	41.0	14.4	Polyethylene strip
Aug. 7 to Sept. 5	29	26.0	18.9	14.8	8.28	Polyethylene strip

04232006 GENESEE RIVER AT CHARLOTTE DOCKS, ROCHESTER, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, SEPTEMBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	SEP 11,79	MAY 7,80	JUN 4,80	JUN 25,80
TIME	1100	1200	1100	1200
TOTAL CELLS/ML	6400	1500	10000	11000
DIVERSITY: DIVISION	0.8	1.3	1.7	1.6
.CLASS	0.8	1.3	1.7	1.6
..ORDER	1.1	1.9	1.9	1.8
...FAMILY	1.4	2.5	2.4	2.0
....GENUS	1.9	2.6	2.9	2.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	--	-
...CHLOROCOCCACEAE								
....CHLOROCOCCUM	49	1	--	-	--	-	--	-
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	--	-	--	-
...MICRACTINIACEAE								
....MICRACTINIUM	--	-	--	-	67	1	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	14	1	270	3	260	2
....CHLORELLA	630	10	--	-	--	-	--	-
....CHODATELLA	97	2	--	-	670	7	--	-
....CLOSTERIOPSIS	--	-	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	97	2	--	-	130	1	--	-
....NEPHROCYTIUM	--	-	--	-	67	1	--	-
....OOCYSTIS	--	-	--	-	270	3	--	-
....SELENASTRUM	--	-	--	-	--	-	88	1
....TETRAEDRON	49	1	--	-	67	1	--	-
...SCENEDESMACEAE								
....ACTINASTRUM	--	-	--	-	--	-	--	-
....CRUCIGENIA	--	-	--	-	--	-	--	-
....SCENEDESMUS	440	7	--	-	2100#	20	1400	13
....TETRASTRUM	--	-	--	-	270	3	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	330	3	530	5
....PLATYMONAS	49	1	--	-	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	4300#	67	150	10	3900#	38	6500#	59
....MELOSIRA	190	3	--	-	--	-	--	-
....SKELETONEMA	150	2	--	-	--	-	--	-
....STEPHANODISCUS	--	-	14	1	67	1	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	14	1	--	-	--	-
....RHOICOSPHENIA	--	-	28	2	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	28	2	--	-	--	-
...DIATOMACEAE								
....DIATOMA	49	1	--	-	--	-	--	-
...FRAGILARIACEAE								
....SYNEDRA	--	-	41	3	--	-	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	28	2	--	-	--	-
...NAVICULACEAE								
....DIPLONEIS	--	-	14	1	--	-	--	-
....NAVICULA	--	-	97	6	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	290	5	150	10	67	1	88	1
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	-	97	6	530	5	260	2
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	14	1	200	2	790	7

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04232006 GENESEE RIVER AT CHARLOTTE DOCKS, ROCHESTER, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, SEPTEMBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	SEP 11,79		MAY 7,80		JUN 4,80		JUN 25,80	
TIME	1100		1200		1100		1200	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	--	-	--	-	270	3	--	-
....ANACYSTIS	--	-	69	5	1000	10	1100	10
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	760#	50	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	--	-

DATE	JUL 17,80	AUG 7,80	SEP 5,80
TIME	1100	1200	1000
TOTAL CELLS/ML	26000	17000	22000
DIVERSITY: DIVISION	1.5	1.4	1.3
.CLASS	1.5	1.4	1.3
..ORDER	1.8	1.7	1.5
...FAMILY	2.0	1.8	2.1
....GENUS	2.3	2.5	3.1

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...CHARACIACEAE						
....SCHROEDERIA	150	1	--	-	200	1
...CHLOROCOCCACEAE						
....CHLOROCOCCUM	--	-	--	-	--	-
...COELASTRACEAE						
....COELASTRUM	--	-	--	-	1400	6
...HYDRODICTYACEAE						
....PEDIASTRUM	3500	14	--	-	--	-
...MICRACTINIACEAE						
....MICRACTINIUM	410	2	--	-	500	2
...OOCYSTACEAE						
....ANKISTRODESMUS	--	-	420	2	*	0
....CHLORELLA	--	-	--	-	--	-
....CHODATELLA	--	-	--	-	--	-
....CLOSTERIOPSIS	--	-	--	-	*	0
....DICTYOSPHAERIUM	--	-	--	-	400	2
....KIRCHNERIELLA	--	-	--	-	400	2
....NEPHROCYTIUM	--	-	--	-	--	-
....OOCYSTIS	--	-	*	0	--	-
....SELENASTRUM	--	-	--	-	--	-
....TETRAEDRON	*	0	--	-	--	-
...SCENEDESMACEAE						
....ACTINASTRUM	--	-	560	3	1600	7
....CRUCIGENIA	--	-	560	3	1200	5
....SCENEDESMUS	410	2	280	2	2000	9
....TETRASTRUM	--	-	--	-	400	2
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	*	0	--	-	300	1
....PLATYMONAS	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04232006 GENESEE RIVER AT CHARLOTTE DOCKS, ROCHESTER, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, SEPTEMBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	JUL 17,80 1100		AUG 7,80 1200		SEP 5,80 1000	
TOTAL CELLS/ML	26000		17000		22000	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	2100	8	4300#	25	4200#	19
....MELOSIRA	11000#	42	7000#	41	7600#	34
....SKELETONEMA	--	-	--	-	--	-
....STEPHANODISCUS	--	-	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	--	-	--	-
...DIATOMACEAE						
....DIATOMA	*	0	--	-	--	-
...FRAGILARIACEAE						
....SYNEDRA	--	-	--	-	--	-
...GOMPHONEMATACEAE						
....GOMPHONEMA	--	-	--	-	--	-
...NAVICULACEAE						
....DIPLONEIS	--	-	--	-	--	-
....NAVICULA	--	-	--	-	--	-
...NITZSCHIACEAE						
....NITZSCHIA	460	2	210	1	500	2
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOCHRYSIDACEAE						
....CHROOMONAS	--	-	210	1	200	1
...CRYPTOMONADACEAE						
....CRYPTOMONAS	200	1	*	0	810	4
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....AGMENELLUM	--	-	--	-	--	-
....ANACYSTIS	510	2	920	5	200	1
..HORMOGONALES						
...OSCILLATORIACEAE						
....OSCILLATORIA	7100#	27	2300	13	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....EUGLENA	--	-	140	1	--	-
....TRACHELOMONAS	--	-	210	1	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04232040 IRONDEQUOIT CREEK NEAR PITTSFORD, N.Y.

LOCATION.--Lat 43°03'14", long 77°29'28", Monroe County, Hydrologic Unit 04140101, on right bank 140 ft (43 m) upstream from bridge on Thornell Road, 0.9 mi (1.4 km) south of creek passage under Erie (Barge) Canal, and 2.7 mi (4.3 km) southeast of Pittsford.

DRAINAGE AREA.--41.9 mi^2 (108.5 km^2).

PERIOD OF RECORD.--Occasional low-flow measurements, waters years 1955, 1961-62, 1964-66, 1968, and annual maximum, water years 1962-63, 1965-66, 1968-70, 1972. March to September 1980.

GAGE.--Water-stage recorder. Prior to March 1980, nonrecording gage and crest-stage gage at site (150 ft) 46 m) downstream at same datum. Altitude of gage is 405 ft (123 m), from Corps of Engineers river-profile map.

REMARKS.--Records good except those above 300 ft^3/s (8.50 m^3/s), which are fair, and those for period of no gage-height record, Mar. 1-20, which are poor. Unpublished water-quality records are available in files of district office.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,140 ft^3/s (32.3 m^3/s) Mar. 12, 1962, gage height 8.6 ft (2.621 m) minimum discharge measured, 8.10 ft^3/s (0.23 m^3/s) Sept. 17, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period March to September, 344 ft^3/s (9.74 m^3/s) Mar. 11, gage height, 6.21 ft (1.893 m); minimum, 13 ft^3/s (0.37 m^3/s) Aug. 27, 28, gage height, 3.27 ft (0.997 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						24	139	55	20	26	20	18
2						22	75	47	36	26	25	69
3						21	60	42	29	26	30	33
4						22	62	37	26	21	28	22
5						23	57	34	22	22	34	20
6						27	49	32	24	24	30	18
7						29	46	32	59	20	24	17
8						32	43	30	163	20	23	17
9						38	44	29	65	20	21	17
10						70	46	29	47	18	19	21
11						300	42	29	38	17	18	18
12						110	43	28	33	16	17	17
13						60	50	33	29	15	16	16
14						47	49	44	26	15	16	26
15						38	64	37	29	15	17	26
16						34	56	32	43	16	17	21
17						66	49	29	30	15	16	20
18						170	45	41	26	15	16	20
19						74	41	40	24	15	15	18
20						86	40	34	39	14	15	18
21						118	38	30	36	15	15	19
22						196	37	28	28	17	15	18
23						77	36	26	24	18	15	23
24						89	37	25	21	16	15	20
25						205	38	23	20	14	15	19
26						89	37	22	19	16	15	20
27						67	37	22	20	21	14	19
28						62	68	21	25	20	14	18
29						80	132	21	31	20	15	18
30						126	69	21	33	20	17	18
31						107	---	22	---	18	17	---
TOTAL						2509	1629	975	1065	571	584	644
MEAN						80.9	54.3	31.5	35.5	18.4	18.8	21.5
MAX						300	139	55	163	26	34	69
MIN						21	36	21	19	14	14	16
CFSM						1.93	1.30	.75	.85	.44	.45	.51
IN.						2.23	1.45	.87	.95	.51	.52	.57

04232046 THOMAS CREEK AT FAIRPORT, NY

LOCATION.--Lat 43°06'22, long 77°27'44", Monroe County, Hydrologic Unit 04140101, on right bank 48 ft (15 m) upstream from culvert on Foreman Center Road, 0.5 mi (0.8 km) northwest of Fairport, and 0.8 mi (1.3 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--28.6 mi^2 (74.1 km^2), flow from 0.86 mi^2 (2.23 km^2) not contributing.

PERIOD OF RECORD.--March to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 403 ft (122.8 m), from topographic map.

REMARKS.--Records fair. Unpublished water-quality records are available in files of district office.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period March to September, 150 ft^3/s (4.25 m^3/s) June 8, gage height, 2.73 ft (0.832 m) result of debris jam; minimum discharge, 2.6 ft^3/s (0.07 m^3/s) Aug. 30; minimum gage height, 1.26 ft (o.384 m) Sept. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, PERIOD MARCH TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						8.8	48	27	7.1	7.5	7.2	6.7
2						9.2	38	23	13	8.5	6.4	34
3						9.4	27	22	9.1	7.7	5.7	19
4						9.8	25	18	7.8	6.1	5.0	11
5						9.6	23	16	7.3	6.1	6.8	7.8
6						10	21	15	13	6.0	15	5.8
7						11	18	16	44	5.0	5.7	4.7
8						12	15	18	130	5.7	9.3	4.4
9						14	16	15	100	5.5	7.6	4.9
10						21	18	13	68	5.6	5.3	4.7
11						38	19	13	39	6.0	4.4	4.1
12						62	19	13	30	5.7	4.4	3.9
13						82	22	18	25	5.6	4.1	4.0
14						62	22	19	19	6.0	4.0	9.2
15						32	27	17	18	6.0	9.9	9.5
16						37	27	15	18	6.1	5.3	6.3
17						34	21	13	15	5.7	4.5	7.7
18						58	21	22	13	5.7	4.5	6.6
19						57	18	18	11	5.6	4.4	5.9
20						53	14	17	17	5.5	4.3	5.7
21						65	13	13	14	6.1	4.4	5.7
22						100	11	11	13	6.8	4.6	5.2
23						75	9.4	9.2	12	6.1	4.9	6.4
24						65	8.3	8.4	10	5.5	5.0	4.9
25						73	9.9	7.4	9.3	5.3	5.5	4.7
26						65	9.1	6.5	8.4	4.7	5.6	6.0
27						45	8.4	6.3	7.8	5.6	5.4	4.8
28						34	27	7.7	9.2	5.4	4.6	4.3
29						34	56	5.7	9.2	5.5	4.3	4.1
30						43	43	5.3	8.1	5.6	4.6	4.2
31						44	---	6.2	---	5.7	5.8	---
TOTAL						1272.8	654.1	434.7	705.3	183.9	178.5	216.2
MEAN						41.1	21.8	14.0	23.5	5.93	5.76	7.21
MAX						100	56	27	130	8.5	15	34
MIN						8.8	8.3	5.3	7.1	4.7	4.0	3.9
CFSM						1.44	.76	.49	.82	.21	.20	.25
IN.						1.66	.85	.57	.92	.24	.23	.28

04232047 IRONDEQUOIT CREEK AT LINDEN AVENUE, EAST ROCHESTER, NY

LOCATION.--Lat 43°07'15", long 77°28'38", Monroe County, Hydrologic Unit 04140101, on left bank 200 ft (61 m) upstream from bridge on Linden Avenue, 2.2 mi (3.5 km) upstream from Allen Creek, and 6.9 mi (11.1 km) upstream from mouth.

DRAINAGE AREA.--92.8 mi² (240 km²), flow from 5.04 mi² (13.1 km²) noncontributing.

PERIOD OF RECORD.--August 1973 to current year.

REVISED RECORDS.--WDR NY-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 341.46 ft (104.077 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Prior to 1980, flow of undetermined magnitude diverted from Erie (Barge) Canal into Thomas Creek.

AVERAGE DISCHARGE.--7 years, 105 ft³/s (2.974 m³/s), 15.37 in/yr (390 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,480 ft³/s (41.9 m³/s) Oct. 29, 1974, gage height, 15.64 ft (4.767 m), result of dewatering of Erie (Barge) Canal through accidental break in canal wall at Bushnell Basin. Minimum daily, 24 ft³/s (0.68 m³/s) July 19, 1980; minimum gage height, 11.21 ft (3.417 m) Aug. 21, 28, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 570 ft³/s (16 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 26	0945	*878	24.9	*14.43	4.398	June 8	0345	795	22.5	14.24	4.340

Minimum daily discharge, 24 ft³/s (0.68 m³/s) July 19; minimum gage height 11.21 ft (3.417 m) Aug. 21, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	58	74	109	51	50	283	117	43	44	33	33
2	52	59	68	102	49	47	180	96	74	48	38	239
3	54	59	63	99	48	44	137	86	56	39	44	85
4	50	57	58	86	46	46	130	77	48	40	33	49
5	100	55	56	82	44	48	122	70	43	38	61	40
6	80	54	57	75	43	59	102	67	63	38	81	35
7	66	65	65	75	42	62	92	65	219	35	37	32
8	60	65	63	73	40	64	85	64	593	36	39	30
9	76	67	58	68	39	73	93	62	251	35	35	32
10	60	77	58	70	38	133	99	59	148	30	30	39
11	58	69	56	70	37	430	93	59	104	29	30	33
12	60	63	57	82	36	228	96	59	82	28	29	30
13	64	62	53	88	34	142	109	72	68	26	27	30
14	60	70	49	84	36	98	115	86	59	26	27	59
15	58	68	48	85	37	77	163	74	61	26	44	62
16	56	69	50	75	38	72	137	64	77	26	29	40
17	56	64	46	74	40	199	110	59	58	25	28	43
18	55	62	54	75	42	364	95	91	52	25	27	38
19	55	59	58	75	42	208	85	78	48	24	27	35
20	66	58	58	69	46	214	79	67	91	25	26	34
21	60	57	50	64	55	298	77	58	67	28	26	36
22	56	63	54	63	65	424	70	54	55	39	25	33
23	63	67	75	61	89	249	67	49	46	35	26	43
24	78	70	144	55	78	232	64	45	41	30	26	36
25	67	77	575	85	73	382	73	43	38	27	26	33
26	59	125	812	53	61	249	69	40	36	26	25	40
27	57	150	361	53	58	169	69	39	36	32	25	35
28	74	118	185	54	55	146	157	40	48	29	26	32
29	70	101	142	53	50	171	271	37	50	30	26	32
30	63	82	125	53	---	249	163	37	48	28	32	31
31	59	---	110	52	---	226	---	43	---	26	39	---
TOTAL	1944	2170	3782	2262	1412	5453	3485	1957	2703	973	1027	1369
MEAN	62.7	72.3	122	73.0	48.7	176	116	63.1	90.1	31.4	33.1	45.6
MAX	100	150	812	109	89	430	283	117	593	48	81	239
MIN	50	54	46	52	34	44	64	37	36	24	25	30
CFSM	.68	.78	1.32	.79	.53	1.90	1.25	.68	.97	.34	.36	.49
IN.	.78	.87	1.52	.91	.57	2.19	1.40	.78	1.08	.39	.41	.55

CAL YR 1979 TOTAL 40686 MEAN 111 MAX 1130 MIN 46 CFSM 1.20 IN 16.31
WTR YR 1980 TOTAL 28537 MEAN 78.0 MAX 812 MIN 24 CFSM .84 IN 11.44

04232050 ALLEN CREEK NEAR ROCHESTER, NY

LOCATION.--Lat 43°07'49", long 77°31'08", Monroe County, Hydrologic Unit 04140101, on right bank 525 ft (160 m) downstream from Penn Central Transportation Co. bridge, near Rochester, and about 1 mi (2 km) upstream from Irondequoit Creek.

DRAINAGE AREA.--30.1 mi^2 (78.0 km^2), flow from 3.5 mi^2 (9.06 km^2) not contributing.

PERIOD OF RECORD.--November 1959 to current year.

REVISED RECORDS.--WRD NY 1974: 1972(M), 1973(M, P). WDR NY-76-1: 1960-75 (M,P), 1960-63, 1972-74.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 323.54 ft (98.615 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Discharge prior to January 1980 included undetermined diversion (maximum 20 ft^3/s or 0.6 m^3/s) from Erie (Barge) Canal upstream from station. January 1980 to present, diversion reduced to a maximum of 3 ft^3/s (0.08 m^3/s) for use by Oak Hill County Club.

AVERAGE DISCHARGE.--20 years (1960-80), 33.8 ft^3/s (0.957 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,280 ft^3/s (92.9 m^3/s) May 17, 1974, gage height, 7.42 ft (2.262 m), from rating curve extended above 1,000 ft^3/s (28.3 m^3/s) on basis of contracted-opening measurement of peak flow and step-backwater analysis; minimum daily discharge, 1.7 ft^3/s (0.048 m^3/s) Jan. 24, 1963; minimum gage height, 1.16 ft (0.354 m) Feb. 19, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft^3/s (12.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 25	2215	1,020	28.9	4.91	1.497	June 7	0230	671	19.0	4.43	1.350
Mar. 11	0030	740	21.0	4.53	1.381	June 8	0600	*1,590	45.0	*5.59	1.704

Minimum discharge, 3.4 ft^3/s (0.96 m^3/s) July 13, gage height, 1.86 ft (0.567 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	26	14	21	12	19	87	26	11	7.9	6.3	22
2	26	27	13	18	16	18	61	21	31	17	14	99
3	29	26	12	16	11	20	48	17	14	9.4	35	21
4	26	26	13	13	9.5	20	54	15	11	6.9	11	12
5	53	26	10	12	9.9	17	38	14	7.9	6.9	14	10
6	46	26	11	11	9.7	20	25	12	38	7.6	61	8.3
7	31	33	13	12	9.6	21	22	12	216	5.5	14	7.6
8	29	27	35	10	10	21	19	12	753	7.3	11	6.9
9	38	27	25	9.6	10	26	34	11	71	6.0	8.6	11
10	29	31	23	8.6	11	158	45	10	37	5.5	7.3	11
11	28	30	22	17	10	241	35	11	23	4.9	7.6	7.3
12	28	28	22	21	10	58	42	10	18	4.6	6.9	6.6
13	30	28	20	11	10	63	40	18	14	4.1	6.6	6.9
14	29	32	16	20	10	30	48	19	13	3.9	6.6	33
15	28	29	11	16	10	26	82	13	16	5.7	38	18
16	27	31	11	13	10	28	45	11	18	6.0	10	11
17	28	28	8.6	20	11	142	33	9.8	11	5.7	7.6	14
18	28	28	7.2	27	12	140	29	31	8.6	5.7	7.6	11
19	27	28	7.2	23	12	80	24	15	8.6	4.9	7.3	8.6
20	42	28	7.6	19	15	81	17	12	39	4.9	6.3	8.3
21	30	27	8.9	17	22	201	24	11	16	5.5	6.0	9.0
22	28	31	15	20	24	147	22	9.8	11	23	5.7	11
23	34	32	34	17	36	74	20	9.4	9.4	11	5.5	23
24	32	34	67	11	23	113	19	9.4	7.6	7.6	5.2	8.6
25	28	32	624	14	21	166	17	8.3	6.6	6.6	5.2	7.6
26	27	60	416	12	16	81	11	7.3	6.3	6.9	5.5	15
27	26	33	74	12	19	60	11	7.3	9.8	8.6	5.7	9.0
28	34	21	44	12	16	48	125	6.3	22	7.3	5.5	7.6
29	28	16	34	12	14	80	77	6.9	16	7.3	5.5	7.3
30	26	15	28	11	---	82	37	7.3	10	6.0	8.6	8.3
31	26	---	24	11	---	97	---	13	---	5.2	11	---
TOTAL	947	866	1670.5	467.2	409.7	2378	1191	395.8	1473.8	225.4	356.1	439.9
MEAN	30.5	28.9	53.9	15.1	14.1	76.7	39.7	12.8	49.1	7.27	11.5	14.7
MAX	53	60	624	27	36	241	125	31	753	23	61	99
MIN	26	15	7.2	8.6	9.5	17	11	6.3	6.3	3.9	5.2	6.6

CAL YR 1979 TOTAL 16056.1 MEAN 44.0 MAX 624 MIN 7.2
WTR YR 1980 TOTAL 10820.4 MEAN 29.6 MAX 753 MIN 3.9

430927077313700 (042320502) IRONDEQUOIT CREEK AT BROWNCROFT BOULEVARD, ROCHESTER, NY

LOCATION.--Lat 43°09'27", long 77°31'37", Monroe County, Hydrologic Unit 04140101, on right bank 200 ft (61 m) downstream from bridge on Browncroft Boulevard, and 1.5 mi (2.4 km) downstream from bridge on Blossom Road, Rochester.

DRAINAGE AREA.--133 mi² (344 km²).

PERIOD OF RECORD.--Water years 1977 to current year.
CHEMICAL DATA: 1977-80 (b).
NUTRIENT DATA: 1977-80 (b).
BIOLOGICAL DATA:
Bacteria--1977-80 (b).
SEDIMENT DATA: 1977 (a), 1978-79 (b).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1977 to current year.
WATER TEMPERATURE: January 1977 to current year.

REVISED RECORDS.--WDR NY-79-1: Drainage area.

INSTRUMENTATION.--Water-quality monitor since January 1977.

REMARKS.--Water-discharge measurements are made and water-quality samples are collected at bridge on Blossom Road. Interruptions in the specific conductance and water-temperature records are due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1977-78): Maximum recorded, 2,300 micromhos Feb. 13, 1977; minimum recorded, 357 micromhos Sept. 25, 1977.
WATER TEMPERATURES (water years 1977-78): Maximum recorded, 28.0°C July 20, 22, 23, 1978; minimum, freezing point on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT³/S)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
DEC 13...	1000	83	1120	7.9	4.5	12.2	94	250	300	370	--	--
MAR 27...	1400	250	850	8.0	5.5	10.8	87	84	K24	48	290	100
JUN 19...	1300	71	1100	8.2	23.0	--	--	4200	310	100	390	160
SEP 23...	1030	79	965	7.6	18.0	6.9	73	K10000	3200	1300	370	190

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
DEC 13...	--	--	--	--	--	--	--	--	--	--	1.4
MAR 27...	78	23	51	2.6	190	96	86	.2	5.7	457	1.3
JUN 19...	110	28	54	2.6	230	170	95	.3	7.3	605	.01
SEP 23...	110	24	50	2.9	180	160	94	.2	7.4	557	.86

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
DEC 13...	.04	1.4	.88	.72	1.6	3.0	.230	.13	660	90	.10
MAR 27...	.01	1.3	.06	.46	.52	1.8	.080	.01	920	70	.10
JUN 19...	.00	.01	.02	.58	.60	.61	.070	.01	750	100	.00
SEP 23...	.03	.89	.08	.23	.31	1.2	.110	.02	100	90	.10

K Results based on colony count outside the acceptable range (non-ideal colony count).

430927077313700 (042320502) IRONDEQUOIT CREEK AT BROWNCROFT BOULEVARD, ROCHESTER, NY

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1				964	913	939	1110	1010	1050			
2				967	917	938	1140	1010	1090			
3				993	937	961	1170	1080	1100			
4				994	933	960	1150	1060	1100			
5				1000	953	980	1140	1040	1090			
6				1000	961	975	1150	1060	1100			
7				990	879	936	1170	1060	1110			
8				978	902	946	1140	1050	1090			
9				992	929	971	1140	1040	1060			
10				968	906	937	1150	1050	1100			
11				990	936	973	1160	1050	1070			
12				965	960	963	1140	1050	1090			
13				993	950	970						
14				1000	847	914						
15				954	867	920						
16				936	892	910						
17				978	921	943						
18				1000	936	959						
19	1080	1020	1050	991	926	957						
20	1050	795	930	989	936	957						
21	964	845	910	989	936	950						
22	989	953	363	1250	921	1010						
23	1000	829	936	1030	926	966						
24	903	815	862	1040	936	981				1320	1230	1260
25	956	892	916	994	950	970				1380	1240	1320
26	961	900	916	1020	752	911				1430	1320	1370
27	961	913	931	895	758	843				1420	1350	1370
28	942	831	883	936	859	887				1430	1370	1390
29	967	890	925	991	903	934				1410	1220	1330
30	953	903	926	1060	950	981				1390	1270	1340
31	969	908	931	---	---	---				1410	1330	1370
MONTH	1080	795	929	1250	752	948	1170	1010	1090	1430	1220	1340

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1440	1370	1410	1520	1420	1470	829	785	803	867	773	814
2	1480	1380	1430	1500	1410	1450	950	806	873	906	766	853
3	1460	1380	1420	1560	1450	1500	989	939	965	912	831	876
4	1470	1360	1410	1660	1470	1550	1020	967	985	981	867	897
5	1430	1350	1400	1610	1490	1530	1040	975	1000	1090	918	1040
6	1430	1330	1380	1680	1500	1590	1040	972	993	1140	934	1030
7	1420	1340	1360	1550	1370	1460	1110	994	1030	1180	1040	1080
8	1390	1330	1360	1800	1360	1510	1150	997	1060	1260	955	1070
9	1390	1280	1340	1850	1670	1770	1120	947	1030	1180	1040	1080
10	1440	1290	1350	1720	689	1460	991	838	922	1330	1090	1220
11	1370	1300	1330	720	585	620	1060	975	1010	1260	1130	1200
12	1460	1270	1310	972	713	826	1090	953	1020	1160	1060	1080
13	1580	1330	1400	1100	939	994	989	939	960	1080	903	1020
14	1550	1350	1390	1450	978	1190	991	895	959	1000	858	902
15	1550	1320	1380	1540	1290	1370	936	873	899	965	842	867
16	1390	1310	1350	1490	1300	1410	945	903	916	1240	931	1100
17	1420	1300	1360	1490	809	1340	991	923	949	1190	1070	1130
18	1400	1230	1350	810	668	701	1050	969	1000	1250	729	999
19	1530	1230	1340	816	697	770	1090	991	1030	1070	782	917
20	1650	1390	1580	872	785	843	1120	994	1060	1210	1030	1120
21	1620	1510	1580	883	791	830	1160	1020	1100	1250	1040	1120
22	1530	1410	1460	800	758	771	1210	1120	1160	1150	1070	1100
23	1550	1170	1310	831	783	805	1210	1060	1150	1260	1090	1200
24	1230	1140	1170	829	819	824	1190	1090	1140	1320	1180	1250
25	1290	1130	1190	823	763	788	1190	1060	1170	1230	1160	1200
26	1360	1210	1280	786	757	768				1340	1170	1260
27	1420	1170	1310	900	786	566				1310	1170	1250
28	1470	1320	1400	961	885	924				1250	1180	1220
29	1480	1310	1380	967	905	936				1250	1170	1210
30	---	---	---	910	822	866				1300	1220	1260
31	---	---	---	887	813	847	---	---	---	1440	1170	1270
MONTH	1650	1130	1370	1850	585	1110	1210	785	1010	1440	729	1090

430927077313700 (042320502) IRONDEQUOIT CREEK AT BROWNCROFT BOULEVARD, ROCHESTER, NY

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1460	1220	1380	-	-	-	1240	1220	1230			
2	1300	1080	1150	-	-	-	1220	1030	1120			
3	1350	1080	1260	1130	980	1050	1030	846	929			
4	1240	1060	1140	1230	1110	1140	1090	932	1020			
5	1310	1230	1270	1230	1120	1160	1170	1090	1120			
6	1320	1180	1210	1130	1070	1090	1110	831	893			
7	1180	488	564	1140	1080	1100	-	-	-			
8	856	652	762	1190	1080	1120	-	-	-			
9	921	839	897	1150	1050	1090	1160	1100	1100			
10	903	886	895	1140	1060	1100	1210	1160	1180			
11	886	872	878	1120	1060	1100	1210	1180	1190			
12	875	861	870	1110	1060	1080	1200	1180	1190			
13	925	870	915	1160	1060	1120	1190	1180	1190			
14	972	910	951	1150	1080	1110	1200	1180	1190			
15	1010	933	959	1200	1090	1130	1200	1050	1120			
16	966	881	919	1270	1160	1220	1120	1080	1110			
17	981	946	963	1240	1130	1190	1120	1110	1120			
18	1050	975	1010	1240	1130	1210	1160	1120	1140			
19	975	944	960	1240	1170	1210	1170	1160	1160			
20	944	875	903	1230	1100	1150	1190	1160	1170			
21	875	865	872	1160	1090	1120	1200	1170	1190			
22	965	860	962	1140	885	972	1220	1200	1210			
23	984	961	971	1040	977	1010	1260	1220	1240			
24	1010	984	998	1190	1040	1110	1270	1230	1240	1000	980	980
25	1030	1010	1020	1230	1190	1210	1270	1260	1270	1030	990	1010
26	1040	1010	1020	1240	1210	1230	1270	1250	1260	1050	940	1000
27	1020	1000	1020	1250	1200	1230	1280	1220	1250	940	900	930
28	1000	954	985	1210	1180	1190	1230	1200	1230	900	680	806
29	963	950	957	1210	1180	1200	1200	1090	1120	683	660	669
30	981	863	927	1220	1190	1210	-	-	-	677	656	666
31	---	---	---	1220	1200	1210	-	-	-	---	---	---
MONTH	1460	488	986	1270	885	1140	1280	831	1150	1050	656	866

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1				10.0	8.0	9.0	.0	.0	.0			
2				10.0	8.5	9.5	.5	.0	.0			
3				8.0	7.5	8.0	.0	.0	.0			
4				7.5	6.0	7.0	1.5	.0	.0			
5				7.5	4.5	6.0	4.0	1.5	2.5			
6				8.0	6.0	7.0	6.0	3.5	5.0			
7				8.0	7.0	8.0	6.0	4.5	5.0			
8				7.0	5.5	6.5	5.5	2.0	3.5			
9				7.5	6.5	7.0	2.0	.5	1.0			
10				8.5	7.5	8.0	3.0	1.5	2.0			
11				8.0	7.5	8.0	7.5	3.0	5.5			
12				7.5	3.5	5.0	9.5	8.0	9.0			
13				4.5	2.0	3.0						
14				4.0	3.0	3.5						
15				4.0	2.0	3.0						
16				4.5	1.0	2.0						
17				4.0	1.0	2.5						
18				5.0	2.5	4.0						
19	13.0	9.5	11.0	6.0	3.0	4.5						
20	16.0	13.0	14.0	8.5	5.5	7.0						
21	16.5	15.0	16.0	8.5	8.0	8.0						
22	18.0	15.5	16.5	9.5	8.0	8.5						
23	17.0	14.0	15.5	11.0	9.5	10.0						
24	14.0	11.0	12.0	11.5	10.0	11.0				.5	.0	.0
25	10.5	8.0	9.0	10.0	9.0	9.0				.5	.0	.0
26	8.5	7.0	8.0	12.0	9.5	11.0				.5	.0	.5
27	8.0	6.5	7.0	11.0	8.5	9.5				1.0	.5	.5
28	8.0	7.0	8.0	8.5	5.5	7.5				1.5	.5	1.0
29	8.0	7.5	8.0	6.0	2.0	4.0				.5	.5	.5
30	8.0	6.5	7.5	1.5	.5	1.0				.5	.0	.5
31	8.5	5.0	6.5	---	---	---				.5	.0	.0
MONTH	18.0	5.0	10.5	12.0	.5	6.5	9.5	.0	3.0	1.5	.0	.5

430927077313700 (042320502) IRONDEQUOIT CREEK AT BROWNCROFT BOULEVARD, ROCHESTER, NY

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	.0	.0	.0	.0	.0	.0	9.5	4.0	7.0	15.0	11.0	12.5
2	.0	.0	.0	.0	.0	.0	10.5	9.0	9.5	17.5	12.0	14.5
3	.0	.0	.0	.0	.0	.0	11.0	7.0	9.0	19.0	13.5	16.5
4	.0	.0	.0	.0	.0	.0	10.5	8.5	10.0	18.0	14.5	16.0
5	.0	.0	.0	.0	.0	.0	11.5	7.0	9.0	19.5	15.0	17.0
6	.0	.0	.0	.0	.0	.0	12.5	7.5	10.0	18.5	15.0	16.5
7	.0	.0	.0	1.5	.0	.5	14.5	8.5	11.5	16.0	12.5	14.0
8	.0	.0	.0	1.0	.0	.0	16.5	12.0	14.0	13.5	11.5	12.0
9	.0	.0	.0	3.0	.0	1.0	17.5	14.5	15.5	12.5	10.5	11.5
10	.0	.0	.0	3.5	.0	.5	15.5	12.0	14.0	14.5	10.5	12.5
11	.0	.0	.0	.0	.0	.0	12.0	10.5	11.0	15.0	12.5	13.5
12	.0	.0	.0	.0	.0	.0	11.0	10.0	10.5	17.0	13.0	15.0
13	.5	.0	.0	.0	.0	.0	11.5	9.5	10.5	16.0	12.5	14.0
14	1.5	.0	.5	.0	.0	.0	10.5	9.0	9.5	12.5	11.5	12.0
15	1.5	.0	.5	2.0	.0	.0	9.5	9.0	9.0	13.0	10.5	11.5
16	.0	.0	.0	1.5	.0	.0	9.0	3.0	6.0	16.0	10.5	13.0
17	.0	.0	.0	2.0	1.0	1.5	9.5	2.0	5.5	17.0	12.5	14.5
18	.0	.0	.0	1.0	.0	.5	12.5	7.0	9.5	16.0	13.5	14.5
19	1.0	.0	.0	3.5	.0	1.0	15.0	9.0	11.5	16.5	14.5	15.5
20	3.0	.0	1.0	5.5	1.5	3.5	15.0	12.0	13.5	17.5	13.0	15.0
21	3.0	2.0	2.5	7.5	4.0	5.5	16.0	11.0	13.5	17.0	14.5	15.5
22	2.5	1.5	2.0	5.0	1.0	2.0	16.0	11.0	13.0	19.5	14.5	17.0
23	2.5	1.0	1.5	2.5	.5	1.5	16.0	11.0	13.5	21.5	16.5	19.0
24	2.5	1.5	2.0	5.5	2.0	3.5	15.5	12.0	14.0	22.0	18.0	20.0
25	2.0	1.0	1.5	5.0	3.0	3.5	14.0	10.5	12.5	21.0	18.5	19.5
26	1.0	.0	.0	5.0	2.5	3.5	-	-	-	19.5	16.0	18.0
27	.0	.0	.0	7.0	3.0	5.0	-	-	-	18.0	14.5	16.5
28	.0	.0	.0	8.5	4.5	6.5	-	-	-	17.5	14.5	16.0
29	.0	.0	.0	8.0	7.0	7.5	-	-	-	19.5	14.5	17.0
30	---	---	---	9.0	5.5	7.0	-	-	-	20.5	16.5	18.5
31	---	---	---	7.5	7.0	7.0	---	---	---	22.5	19.0	20.5
MONTH	3.0	.0	.5	9.0	.0	2.0	17.5	2.0	11.0	22.5	10.5	15.5

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.0	17.5	18.5	24.5	20.5	23.5	24.5	23.0	24.0	22.5	21.0	22.0
2	18.5	16.0	17.5	22.5	21.5	22.0	26.0	23.0	24.5	22.5	22.0	22.0
3	18.5	18.0	18.0	24.5	20.0	22.0	25.0	23.5	24.5	21.5	20.5	21.0
4	20.5	16.5	18.5	24.5	20.5	23.0	25.0	22.5	24.0	-	-	-
5	19.5	16.0	18.0	24.5	22.0	23.5	-	-	-	-	-	-
6	18.0	15.5	17.0	24.5	21.5	23.0	27.5	25.0	26.0	-	-	-
7	19.5	18.0	18.5	23.0	20.0	21.5	-	-	-	19.0	18.0	18.5
8	20.0	18.0	19.0	22.5	20.0	21.5	-	-	-	18.5	17.0	18.0
9	17.5	15.0	16.0	23.0	20.0	21.5	27.5	25.0	26.5	18.0	16.5	17.5
10	15.0	14.0	14.5	24.0	20.0	22.5	26.0	23.5	24.5	17.5	16.5	17.0
11	15.0	13.5	14.0	25.0	21.5	23.5	23.5	22.0	23.0	17.0	14.5	16.0
12	16.5	13.5	15.0	24.0	21.5	23.0	23.5	22.5	23.0	16.5	15.5	16.0
13	19.0	15.5	17.0	24.5	20.5	23.0	23.5	22.0	23.0	16.0	15.0	15.5
14	20.5	17.5	19.0	25.5	21.0	23.5	23.0	22.0	22.5	17.5	16.0	16.5
15	20.5	19.5	20.0	25.5	22.5	24.5	24.0	22.0	23.0	17.0	15.0	16.0
16	20.0	17.5	19.0	27.0	24.0	26.0	22.5	20.0	21.0	-	-	-
17	19.5	16.5	18.0	27.0	24.5	25.5	22.0	19.5	21.0	-	-	-
18	20.5	17.0	18.5	27.0	23.5	25.5	21.5	19.5	20.5	-	-	-
19	21.0	19.0	20.0	27.5	24.0	25.5	22.0	20.0	21.5	-	-	-
20	21.0	17.5	19.5	27.0	25.0	26.0	22.5	20.0	21.5	-	-	-
21	21.0	17.5	19.0	28.0	24.5	26.5	23.0	20.5	22.0	-	-	-
22	21.5	19.0	20.5	28.0	23.5	25.5	22.5	20.5	22.0	-	-	-
23	24.0	20.0	21.5	25.0	23.0	24.0	22.5	21.0	22.0	-	-	-
24	25.0	22.0	23.5	25.0	22.0	24.0	23.0	20.5	22.0	16.5	14.5	15.5
25	25.5	23.0	24.5	24.5	21.5	23.5	22.0	20.5	21.5	14.5	13.0	13.5
26	26.0	24.0	25.0	24.5	22.5	23.5	21.5	20.0	21.0	14.0	11.5	12.5
27	26.0	22.5	24.0	25.0	22.0	23.5	22.5	20.0	21.5	11.5	10.0	11.0
28	22.5	20.5	21.5	24.5	23.5	23.5	22.5	19.5	21.0	12.0	10.5	11.5
29	26.0	20.0	21.5	25.0	22.0	23.5	21.5	19.0	20.0	11.5	9.5	11.0
30	25.5	23.5	24.5	25.0	23.0	24.0	21.5	20.5	21.0	13.5	10.5	12.5
31	---	---	---	25.0	22.5	24.0	22.5	20.5	21.5	---	---	---
MONTH	26.0	13.5	19.5	28.0	20.0	23.5	27.5	19.0	22.5	22.5	9.5	16.0

04232100 STERLING CREEK AT STERLING, NY

LOCATION.--Lat 43°19'31", long 76°38'51", Cayuga County, Hydrologic Unit 04140101, on right bank at Sterling, 25 ft (8 m) downstream from bridge on State Highway 104A, 1.8 mi (2.9 km) southwest of Sterling Valley, and 1.9 mi (3.1 km) upstream from Sterling Valley Creek.

DRAINAGE AREA.--44.4 mi^2 (115 km^2).

PERIOD OF RECORD.--April 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 264.69 ft (80.677 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods and those above 600 ft^3/s, which are poor.

AVERAGE DISCHARGE.--23 years, 67.5 ft^3/s (1.912 m^3/s), 20.65 in/yr (525 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,370 ft^3/s (67.1 m^3/s) Mar. 22, 1980, gage height, 5.99 ft^3/s (1.826 m); from rating curve extended above 960 ft^3/s (27.2 m^3/s), minimum, 0.32 ft^3/s (0.009 m^3/s) Sept. 14, 1966, gage height, 1.50 ft (0.457 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 630 ft^3/s (17.8 m^3/s) and maximum (*):

Date	Time	Discharge		Gage height	
		(ft^3/s)	(m^3/s)	(ft)	(m)
Nov. 26	2130	680	19.3	4.01	1.222
Dec. 25	2200	656	18.6	3.97	1.210
Mar. 22	0530	*2,370	67.1	*5.99	1.826

Minimum discharge, 1.7 ft^3/s (0.05 m^3/s) Sept. 9, 10, 11, 12, gage height, 1.63 ft (0.497 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	32	118	76	29	48	197	108	12	15	8.2	2.0
2	8.7	31	92	67	29	42	157	79	34	15	7.0	13
3	8.7	40	75	54	28	38	127	68	28	15	8.2	19
4	8.7	39	65	50	28	36	114	64	27	13	8.2	10
5	17	39	59	45	28	39	116	58	23	13	8.2	7.0
6	125	35	55	40	29	45	102	55	19	13	10	5.0
7	85	39	55	32	29	47	81	51	28	11	8.2	5.0
8	65	46	54	30	30	48	68	47	68	9.9	6.4	2.7
9	58	41	50	30	30	58	172	46	62	9.9	5.9	1.9
10	54	55	47	27	32	60	417	45	70	8.7	7.0	1.7
11	47	51	45	28	33	70	277	43	62	8.2	7.6	1.7
12	46	47	43	37	35	80	200	42	54	7.6	7.0	1.9
13	51	50	41	34	36	90	211	41	42	7.0	6.4	2.3
14	45	51	39	40	36	60	177	45	34	6.4	6.4	3.7
15	42	51	39	55	36	54	203	43	29	6.4	7.6	4.3
16	37	64	37	50	38	60	187	41	30	6.4	5.0	3.3
17	33	64	36	46	38	71	160	36	29	5.9	5.0	3.3
18	32	59	36	54	36	184	125	40	27	5.9	4.6	4.0
19	34	54	34	57	34	189	100	40	24	5.3	4.0	4.0
20	30	48	30	51	32	314	83	34	37	5.3	4.0	3.3
21	28	46	28	40	34	1130	75	31	40	7.0	3.7	3.3
22	26	45	32	38	40	2170	65	28	39	7.6	3.3	3.3
23	24	48	51	34	55	1150	59	24	33	9.3	3.3	3.7
24	37	47	94	34	59	565	54	20	24	7.6	2.7	3.3
25	37	58	450	34	59	450	58	18	19	6.4	2.3	3.0
26	43	321	549	32	58	329	61	15	15	5.3	2.3	3.0
27	40	626	372	32	54	258	58	13	13	5.3	2.3	3.0
28	39	485	231	31	52	228	85	12	12	5.0	2.0	3.0
29	40	303	160	29	50	244	177	11	12	6.4	2.0	2.7
30	36	177	118	29	---	277	148	10	15	10	2.0	2.7
31	33	---	92	29	---	228	---	12	---	9.3	2.0	---
TOTAL	1219.3	3092	3227	1265	1107	8662	4114	1220	961	267.1	162.8	130.1
MEAN	39.3	103	104	40.8	38.2	279	137	39.4	32.0	8.62	5.25	4.34
MAX	125	626	549	76	59	2170	417	108	70	15	10	19
MIN	8.7	31	28	27	28	36	54	10	12	5.0	2.0	1.7
CFSM	.89	2.32	2.34	.92	.86	6.28	3.09	.89	.72	.19	.12	.10
IN.	1.02	2.59	2.70	1.06	.93	7.26	3.45	1.02	.81	.22	.14	.11

CAL YR 1979 TOTAL 35255.2 MEAN 96.6 MAX 1800 MIN 3.9 CFSM 2.18 IN 29.54
WTR YR 1980 TOTAL 25427.3 MEAN 69.5 MAX 2170 MIN 1.7 CFSM 1.57 IN 21.30

04232400 SENECA LAKE AT WATKINS GLEN, NY

LOCATION.--Lat 42°23'00", long 76°52'05", Schuyler County, Hydrologic Unit 04140201, on east bank about 300 ft (91 m) from lake on shorter of two boat slips at Watkins Glen.

DRAINAGE AREA.--704 mi^2 (1,823 km^2).

PERIOD OF RECORD.--October 1956 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datm of 1929 (1.59 ft or 0.485 m, Barge Canal datum). Prior to Oct. 1, 1975, at datum 438.41 ft (133.627 m) higher.

REMARKS.--Area of water surface, 67.6 mi^2 (175 km^2). Diversion from Susquehanna River basin enters lake through Keuka Lake Outlet at Dresden. For table of diversion, see station 01528700. Lake regulated by taintor gates on Seneca River at lock 4, Waterloo, for operation of Erie (Barge) Canal and power generation by New York State Electric and Gas Corp.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 448.88 ft (136.819 m) June 25, 1972; minimum, 442.64 ft (134.917 m) Mar. 14, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 445.78 ft (135.874 m) Apr. 10; minimum, 443.34 ft (135.130 m) Mar. 8.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	444.59	444.35	445.24	444.39	443.54	443.54	445.54	445.36	444.85	444.95	444.70	444.53
2	444.59	444.50	445.22	444.35	443.52	443.49	445.59	445.32	444.85	444.91	444.74	444.56
3	444.57	444.63	445.13	444.30	443.50	443.43	445.63	445.28	444.90	444.86	444.77	444.59
4	444.56	444.65	445.08	444.23	443.51	443.43	445.63	445.24	444.92	444.87	444.83	444.58
5	444.60	444.62	444.97	444.19	443.50	443.45	445.67	445.19	444.92	444.88	444.78	444.54
6	444.85	444.57	444.94	444.10	443.50	443.47	445.65	445.15	444.88	444.99	444.76	444.57
7	444.86	444.58	444.89	443.99	443.51	443.52	445.61	445.09	444.90	444.94	444.77	444.56
8	444.98	444.55	444.87	443.99	443.50	443.58	445.58	445.03	444.97	444.84	444.73	444.53
9	444.97	444.49	444.78	443.95	443.49	443.61	445.60	444.98	444.98	444.85	444.78	444.46
10	444.93	444.52	444.74	443.87	443.50	443.61	445.68	444.99	444.94	444.84	444.75	444.54
11	444.88	444.56	444.65	443.79	443.48	443.68	445.68	445.00	444.88	444.79	444.76	444.45
12	444.77	444.60	444.63	443.85	443.48	443.69	445.64	445.05	444.84	444.84	444.74	444.47
13	444.77	444.60	444.60	443.81	443.48	443.67	445.62	445.03	444.79	444.82	444.74	444.45
14	444.77	444.56	444.53	443.86	443.49	443.75	445.57	444.98	444.79	444.77	444.68	444.41
15	444.68	444.50	444.43	443.87	443.50	443.76	445.61	444.92	444.82	444.75	444.74	444.56
16	444.66	444.50	444.35	443.81	443.54	443.72	445.62	444.87	444.89	444.77	444.77	444.41
17	444.62	444.47	444.32	443.74	443.52	443.73	445.56	444.87	444.83	444.79	444.68	444.34
18	444.57	444.49	444.24	443.72	443.51	443.94	445.49	444.88	444.78	444.80	444.59	444.49
19	444.52	444.47	444.17	443.73	443.50	444.02	445.44	444.93	444.77	444.76	444.60	444.43
20	444.45	444.44	444.10	443.74	443.51	444.07	445.39	444.92	444.80	444.77	444.66	444.38
21	444.43	444.42	444.02	443.72	443.54	444.21	445.33	444.90	444.84	444.80	444.57	444.44
22	444.42	444.41	444.01	443.68	443.53	444.57	445.31	444.89	444.84	444.76	444.59	444.45
23	444.41	444.43	444.03	443.69	443.58	444.67	445.29	444.88	444.81	444.80	444.61	444.50
24	444.47	444.47	444.10	443.65	443.59	444.74	445.23	444.88	444.79	444.82	444.60	444.50
25	444.49	444.55	444.33	443.63	443.61	444.89	445.16	444.91	444.82	444.75	444.59	444.41
26	444.47	444.88	444.58	443.62	443.60	444.98	445.13	444.93	444.79	444.76	444.57	444.47
27	444.44	445.32	444.59	443.63	443.54	445.00	445.11	444.91	444.82	444.76	444.56	444.49
28	444.44	445.35	444.57	443.62	443.56	445.01	445.16	444.87	444.86	444.71	444.58	444.41
29	444.48	445.34	444.52	443.60	443.55	445.09	445.34	444.84	444.88	444.77	444.56	444.44
30	444.51	445.30	444.49	443.60	---	445.25	445.38	444.81	444.93	444.78	444.52	444.37
31	444.42	---	444.44	443.58	---	445.37	---	444.81	---	444.72	444.56	---
MEAN	444.62	444.64	444.57	443.85	443.52	444.09	445.47	444.99	444.86	444.81	444.67	444.48
MAX	444.98	445.35	445.24	444.39	443.61	445.37	445.68	445.36	444.98	444.99	444.83	444.59
MIN	444.41	444.35	444.01	443.58	443.48	443.43	445.11	444.81	444.77	444.71	444.52	444.34

CAL YR 1979 MEAN 444.71 MAX 445.35 MIN 443.15
WTR YR 1980 MEAN 444.55 MAX 445.68 MIN 443.43

04232450 KEUKA INLET (KEUKA LAKE) AT HAMMONDSPORT, NY
(Formerly published as Keuka Lake at Hammondsport)

LOCATION.--Lat 42°24'22", long 77°13'08", Steuben County, Hydrologic Unit 04140201, on left bank of Keuka Inlet at end of Liberty Street extension at Hammondsport, and 300 ft (91 m) upstream from mouth.

DRAINAGE AREA.--Keuka Inlet 25.0 mi^2 (64.8 km^2); Keuka Lake at mouth 182 mi^2 (471 km^2).

PERIOD OF RECORD.--August 1960 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to October 1, 1975, at datum 710.00 ft (216.408 m) higher.

REMARKS.--Lake regulated by village of Penn Yan; prior to July 1962, by New York State Electric and Gas Corp. Area of water surface, 18.3 mi^2 (47.4 km^2). During each year, a large part of flow from 45.5 mi^2 (118 km^2) of drainage area of Mud Creek (Susquehanna River basin) is diverted into Keuka Lake for power development. For table of diversion, see station 01528700.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 719.35 ft (219.258 m) June 24, 1972; minimum daily, 711.40 ft (216.835 m) Feb. 2, 3, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 715.00 ft (217.932 m) Apr 15; minimum, 712.53 ft (217.179 m) Feb. 22.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	713.38	713.18	713.59	713.61	713.03	712.63	714.67	714.79	714.00	714.20	713.92	713.81
2	713.38	713.24	713.58	713.60	713.01	712.61	714.75	714.79	714.01	714.18	713.93	713.83
3	713.41	713.28	713.55	713.59	712.98	712.61	714.79	714.77	714.02	714.16	714.02	713.86
4	713.43	713.27	713.52	713.56	712.97	712.61	714.80	714.77	714.03	714.13	714.05	713.84
5	713.54	713.24	713.48	713.55	712.95	712.61	714.83	714.75	714.03	714.11	714.02	713.83
6	713.80	713.22	713.47	713.51	712.93	712.63	714.83	714.77	714.00	714.13	714.02	713.81
7	713.81	713.22	713.45	713.44	712.91	712.69	714.80	714.77	714.00	714.08	714.01	713.80
8	713.80	713.19	713.41	713.44	712.89	712.63	714.78	714.77	714.05	714.09	714.01	713.79
9	713.80	713.17	713.37	713.42	712.87	712.69	714.78	714.77	714.05	714.09	714.02	713.75
10	713.78	713.17	713.34	713.40	712.85	712.74	714.82	714.75	714.04	714.08	714.01	713.77
11	713.74	713.15	713.29	713.35	712.83	712.80	714.82	714.70	714.04	714.06	714.03	713.72
12	713.69	713.13	713.28	713.36	712.81	712.90	714.81	714.62	714.04	714.07	714.02	713.73
13	713.66	713.10	713.27	713.31	712.79	712.80	714.80	714.62	714.03	714.05	714.02	713.70
14	713.64	713.08	713.22	713.30	712.77	712.75	714.80	714.58	714.03	714.03	714.00	713.73
15	713.60	713.05	713.18	713.30	712.75	712.85	714.91	714.58	714.04	714.01	714.04	713.78
16	713.59	713.03	713.15	713.26	712.76	712.80	714.94	714.52	714.10	714.02	714.03	713.71
17	713.54	713.00	713.13	713.23	712.72	712.75	714.91	714.52	714.06	714.00	713.99	713.69
18	713.54	712.98	713.11	713.23	712.70	713.05	714.88	714.45	714.06	714.01	713.95	713.70
19	713.49	712.95	713.11	713.22	712.67	713.10	714.85	714.40	714.05	714.00	713.95	713.62
20	713.46	712.93	713.09	713.21	712.65	713.10	714.81	714.35	714.05	713.99	713.96	713.56
21	713.45	712.92	713.05	713.20	712.64	713.15	714.77	714.35	714.09	713.98	713.94	713.54
22	713.43	712.88	713.03	713.18	712.63	713.80	714.77	714.20	714.08	713.97	713.92	713.50
23	713.42	712.87	713.02	713.17	712.65	713.70	714.75	714.10	714.08	713.97	713.91	713.45
24	713.41	712.86	713.07	713.16	712.63	713.75	714.75	714.10	714.07	713.97	713.90	713.42
25	713.40	712.89	713.32	713.15	712.63	713.80	714.70	714.05	714.08	713.94	713.88	713.35
26	713.36	713.19	713.56	713.13	712.64	713.90	714.70	714.05	714.07	713.94	713.83	713.30
27	713.33	713.59	713.60	713.12	712.63	714.05	714.65	714.00	714.10	713.92	713.81	713.25
28	713.30	713.62	713.62	713.10	712.61	714.05	714.72	714.00	714.12	713.90	713.83	713.20
29	713.30	713.63	713.61	713.09	712.63	714.12	714.81	714.00	714.17	713.95	713.81	713.15
30	713.28	713.61	713.61	713.07	---	714.26	714.81	713.97	714.20	713.96	713.82	713.10
31	713.23	---	713.62	713.06	---	714.40	---	713.97	---	713.93	713.82	---
MEAN	713.52	713.15	713.35	713.30	712.78	713.17	714.79	714.45	714.06	714.03	713.95	713.61
MAX	713.81	713.63	713.62	713.61	713.03	714.40	714.94	714.79	714.20	714.20	714.05	713.86
MIN	713.23	712.86	713.02	713.06	712.61	712.61	714.65	713.97	714.00	713.90	713.81	713.10

CAL YR 1979 MEAN 713.84 MAX 715.10 MIN 712.65
WTR YR 1980 MEAN 713.68 MAX 714.94 MIN 712.61

04232482 KEUKA LAKE OUTLET AT DRESDEN, NY

LOCATION.--Lat 42°40'49", long 76°57'15", Yates County, Hydrologic Unit 04140201, on right bank at upstream side of bridge on Milo Street in Dresden, and 0.4 mi (0.6 km) upstream from mouth.

DRAINAGE AREA.--207 mi^2 (536 km^2).

PERIOD OF RECORD.--April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 446.67 ft (136.145 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by village of Penn Yan. During each year a large part of flow from 45.5 mi^2 (118 km^2) of Mud Creek drainage area (Susquehanna River basin) is diverted into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--15 years, 212 ft^3/s (6.004 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft^3/s (113 m^3/s) June 22, 1972, gage height, 8.37 ft (2.551 m), from rating curve extended above 2,100 ft^3/s (59.5 m^3/s) on basis of contracted-opening measurement at Mays Mill, adjusted for intervening area; minimum daily, 11 ft^3/s (0.31 m^3/s) June 27, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,020 ft^3/s (57.2 m^3/s) Nov. 26, gage height, 4.91 ft (1.497 m); minimum daily, 11 ft^3/s (0.31 m^3/s) June 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	240	330	302	233	38	548	510	23	25	21	20
2	25	293	321	297	284	39	480	490	23	168	24	23
3	26	269	316	293	335	40	470	485	46	168	25	21
4	26	244	316	288	380	40	480	475	18	168	20	20
5	202	219	311	284	370	40	470	470	17	168	20	20
6	505	236	302	280	360	39	450	455	17	162	19	20
7	405	236	307	284	345	29	435	450	17	62	18	20
8	345	254	311	276	325	36	445	445	21	24	18	21
9	345	297	307	254	311	120	475	440	17	23	16	21
10	335	302	297	199	297	99	490	430	16	22	15	22
11	325	297	297	265	280	53	460	420	15	21	15	21
12	307	288	293	307	258	83	450	415	15	20	15	21
13	302	284	288	307	247	48	440	410	15	20	15	21
14	297	288	288	293	216	33	460	410	15	20	16	29
15	293	288	284	288	193	33	515	405	16	20	15	21
16	284	280	284	288	199	48	460	405	21	20	15	21
17	280	276	269	216	199	199	445	395	15	20	15	60
18	276	269	265	165	199	325	465	395	15	20	15	244
19	273	269	262	165	193	244	470	390	14	20	15	244
20	262	265	258	165	193	244	455	385	16	21	14	244
21	258	258	254	165	190	465	460	375	15	20	16	236
22	254	262	247	162	196	450	450	370	13	21	53	233
23	262	258	244	162	199	375	430	174	13	20	53	226
24	288	258	280	153	193	385	420	109	12	20	52	223
25	258	297	539	230	112	455	415	251	12	20	72	223
26	247	796	415	209	33	395	415	251	13	20	233	219
27	244	405	340	171	44	385	370	136	11	20	21	212
28	254	370	325	156	35	400	316	26	16	20	20	209
29	247	355	316	165	60	495	320	24	20	24	20	209
30	240	345	311	156	---	500	415	23	20	23	21	168
31	236	---	302	199	---	606	---	23	---	21	20	---
TOTAL	7926	8998	9479	7144	6479	6741	13374	10442	517	1421	927	3292
MEAN	256	300	306	230	223	217	446	337	17.2	45.8	29.9	110
MAX	505	796	539	307	380	606	548	510	46	168	233	244
MIN	25	219	244	153	33	29	316	23	11	20	14	20

CAL YR 1979 TOTAL 88864 MEAN 243 MAX 796 MIN 22
WTR YR 1980 TOTAL 76740 MEAN 210 MAX 796 MIN 11

04233000 CAYUGA INLET NEAR ITHACA, NY

LOCATION.--Lat 42°23'35", long 76°32'43", Tompkins County, Hydrologic Unit 04140201, on left bank 0.8 mi (1.3 km) upstream from Enfield (formerly Butternut) Creek, and 5 mi (8 km) south of Ithaca.

DRAINAGE AREA.--35.2 mi² (91.2 km²).

PERIOD OF RECORD.--March 1937 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 437.16 ft (133.246 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--43 years, 38.8 ft³/s (1.099 m³/s), 14.97 in/yr (380 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft³/s (136 m³/s) June 23, 1972, gage height, 8.10 ft (2.469 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of slope-area measurements at gage heights 5.5 ft (1.68 m) and 7.58 ft (2.310 m); minimum, 1.7 ft³/s (0.048 m³/s) July 22, 1955; minimum gage height, 0.42 ft (0.128 m) Aug. 30, 31, Sept. 1, 2, 1939, July 22, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 26	1530	911	25.8	3.38	1.030
Mar. 21	2130	* 963	27.3	*3.48	1.061

Minimum discharge, 2.9 ft³/s (0.08 m³/s) Aug. 27, gage height, 0.49 ft (0.149 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	15	47	39	10	5.4	223	104	15	17	7.2	5.7
2	6.8	75	42	36	11	12	157	88	15	11	12	6.0
3	6.4	71	37	33	10	9.6	122	77	17	9.7	28	6.0
4	6.4	45	36	27	10	6.9	136	63	15	8.4	13	4.9
5	12	36	35	25	11	14	111	54	13	12	8.8	5.3
6	200	32	37	25	10	26	87	50	12	15	7.6	4.9
7	50	34	36	24	12	26	72	46	12	10	6.8	4.3
8	25	32	31	22	14	200	66	42	16	9.2	5.7	4.0
9	24	28	26	19	16	62	170	40	13	8.8	5.3	4.0
10	26	30	25	17	17	41	220	36	14	8.0	4.9	4.9
11	21	26	25	22	17	33	129	34	12	8.0	6.0	4.0
12	18	24	26	22	11	19	104	33	11	7.2	6.0	3.7
13	19	23	31	23	9.6	14	87	45	9.7	6.4	5.3	3.7
14	20	24	26	34	9.2	19	111	49	9.2	6.4	7.6	8.8
15	19	23	22	33	8.4	18	144	38	11	6.0	10	8.8
16	17	24	22	25	8.0	19	87	32	13	5.7	6.4	6.0
17	15	25	19	24	9.6	151	72	29	9.7	5.7	5.7	5.3
18	16	21	18	25	9.2	291	66	29	8.4	5.3	5.3	4.9
19	15	19	18	24	9.6	98	58	28	8.0	4.9	4.9	4.3
20	14	18	19	21	11	90	54	27	14	4.9	4.9	4.3
21	13	17	19	18	12	373	49	26	10	8.0	4.3	4.3
22	16	18	19	18	15	283	43	24	8.4	12	4.3	4.0
23	20	19	27	17	24	139	41	22	8.0	9.2	4.0	4.3
24	36	21	50	14	20	134	38	21	7.6	8.0	3.7	3.7
25	23	26	165	12	15	185	42	19	7.2	6.4	3.7	3.7
26	19	272	125	14	6.0	111	38	18	6.8	5.7	3.4	4.9
27	17	168	82	14	6.8	90	45	17	6.4	5.3	3.4	4.0
28	21	96	65	13	9.6	83	159	16	7.6	5.3	3.7	4.0
29	20	70	56	12	8.8	230	220	16	15	11	5.3	3.7
30	18	56	50	11	---	203	146	15	42	15	9.7	3.7
31	16	---	44	13	---	311	---	15	---	9.2	8.4	---
TOTAL	756.8	1388	1280	676	340.8	3296.9	3097	1153	367.0	264.7	215.3	144.1
MEAN	24.4	46.3	41.3	21.8	11.8	106	103	37.2	12.2	8.54	6.95	4.80
MAX	200	272	165	39	24	373	223	104	42	17	28	8.8
MIN	6.4	15	18	11	6.0	5.4	38	15	6.4	4.9	3.4	3.7
CFSM	.69	1.32	1.17	.62	.34	3.01	2.93	1.06	.35	.24	.20	.14
IN.	.80	1.47	1.35	.71	.36	3.48	3.27	1.22	.39	.28	.23	.15

CAL YR 1979 TOTAL 15724.1 MEAN 43.1 MAX 1010 MIN 3.4 CFSM 1.22 IN 16.62
WTR YR 1980 TOTAL 12979.6 MEAN 35.5 MAX 373 MIN 3.4 CFSM 1.01 IN 13.72

04233500 CAYUGA INLET (CAYUGA LAKE) AT ITHACA, NY
(Formerly published as Cayuga Lake at Ithaca)

LOCATION.--Lat 42°26'45", long 76°30'45", Tompkins County, Hydrologic Unit 04140201, on left bank of natural channel 40 ft (12 m) upstream from flood-control channel of Cayuga Inlet, at north end of Taughannock Boulevard, and 1 mi (2 km) upstream from mouth of Inlet, at Ithaca.

DRAINAGE AREA.--Cayuga Inlet 143 mi² (370 km²); Cayuga Lake at mouth 1,564 mi² (4,051 km²); Cayuga Lake portion 785 mi² (2,033 km²).

PERIOD OF RECORD.--August 1905 to December 1909, August 1956 to current year in reports of Geological Survey. January 1910 to September 1925 in reports of State Engineer and Surveyor.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (1.43 ft or 0.436 m, Barge Canal datum). Prior to September 1925, nonrecording gage at several sites within 1 mi (2 km) of present site. Prior to October 1968, at datum 378.57 ft (115.388 m) higher. October 1968 to September 1975, at datum 376.57 ft (114.779 m) higher.

REMARKS.--Lake regulated at Mud Lock by New York State Department of Transportation. Area of water surface, 66.9 mi² (173 km²). Seneca River (Cayuga and Seneca Canal) enters lake 0.5 mi (0.8 km) upstream from Mud Lock and is included in first drainage area given above.

EXTREMES FOR PERIOD OF RECORD.--(1905-25 and since 1956): Maximum elevation, 386.33 ft (117.753 m) June 26, 1972; minimum daily, 377.64 ft (115.105 m) present datum, Mar. 28, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 382.98 ft (116.732 m) June 9; minimum 378.68 ft (115.422 m) Mar. 3, 4, 5, 7.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	381.92	381.52	381.97	380.23	379.02	378.77	382.49	382.71	382.58	382.60	382.36	382.01
2	381.94	381.70	381.96	380.21	379.00	378.75	382.48	382.68	382.58	382.61	382.39	382.05
3	381.92	381.87	381.81	380.17	378.95	378.73	382.44	382.66	382.59	382.66	382.41	382.09
4	381.91	381.87	381.70	380.08	378.93	378.72	382.37	382.62	382.61	382.66	382.48	382.03
5	381.97	381.82	381.49	380.05	378.90	378.72	382.42	382.55	382.58	382.63	382.43	382.02
6	382.30	381.81	381.43	379.92	378.88	378.76	382.31	382.53	382.48	382.78	382.45	382.04
7	382.35	381.90	381.32	379.72	378.89	378.79	382.14	382.56	382.54	382.70	382.41	382.04
8	382.46	381.87	381.29	379.72	378.86	378.90	382.01	382.60	382.63	382.68	382.39	381.99
9	382.40	381.82	381.09	379.63	378.83	378.99	382.00	382.62	382.61	382.72	382.44	381.94
10	382.32	381.76	380.99	379.47	378.83	379.01	382.09	382.62	382.62	382.69	382.36	382.03
11	382.18	381.69	380.82	379.29	378.78	379.13	382.09	382.57	382.59	382.59	382.35	381.92
12	382.02	381.61	380.77	379.31	378.79	379.15	382.05	382.62	382.55	382.63	382.32	381.96
13	382.02	381.50	380.69	379.03	378.76	379.10	382.06	382.66	382.52	382.57	382.32	381.90
14	381.99	381.51	380.56	378.97	378.77	379.22	381.97	382.71	382.52	382.47	382.21	381.92
15	381.86	381.46	380.36	379.00	378.76	379.25	382.07	382.74	382.54	382.44	382.29	382.04
16	381.84	381.52	380.25	378.93	378.80	379.17	382.13	382.76	382.64	382.45	382.33	381.86
17	381.81	381.42	380.25	378.85	378.77	379.19	382.08	382.74	382.60	382.45	382.19	381.78
18	381.81	381.34	380.07	378.93	378.74	379.58	382.02	382.69	382.56	382.45	382.10	381.97
19	381.76	381.27	379.93	378.97	378.72	379.68	381.99	382.77	382.51	382.38	382.11	381.89
20	381.73	381.29	379.86	378.97	378.73	379.78	381.94	382.79	382.53	382.39	382.15	381.83
21	381.75	381.28	379.76	378.94	378.75	380.03	381.92	382.78	382.57	382.39	382.06	381.88
22	381.76	381.20	379.68	378.91	378.71	380.69	382.00	382.75	382.51	382.35	382.07	381.90
23	381.71	381.13	379.61	378.97	378.77	380.84	382.06	382.72	382.47	382.41	382.11	381.96
24	381.81	381.10	379.58	378.96	378.78	380.93	382.16	382.72	382.46	382.41	382.08	381.91
25	381.86	381.11	379.84	378.95	378.80	381.21	382.24	382.75	382.48	382.33	382.07	381.80
26	381.81	381.38	380.17	378.95	378.84	381.39	382.27	382.72	382.44	382.36	382.04	381.89
27	381.74	381.98	380.28	378.93	378.75	381.48	382.28	382.71	382.45	382.33	382.04	381.89
28	381.67	382.09	380.34	378.93	378.80	381.53	382.39	382.68	382.46	382.25	382.06	381.80
29	381.72	382.12	380.33	378.94	378.80	381.76	382.59	382.64	382.47	382.31	382.02	381.79
30	381.72	382.05	380.32	378.97	---	382.13	382.69	382.56	382.57	382.40	381.99	381.72
31	381.62	---	380.29	378.98	---	382.34	---	382.54	---	382.38	382.02	---
MEAN	381.93	381.60	380.61	379.29	378.82	379.86	382.19	382.67	382.54	382.50	382.23	381.93
MAX	382.46	382.12	381.97	380.23	379.02	382.34	382.69	382.79	382.64	382.78	382.48	382.09
MIN	381.62	381.10	379.58	378.85	378.71	378.72	381.92	382.53	382.44	382.25	381.99	381.72

CAL YR 1979 MEAN 381.48 MAX 382.84 MIN 378.65
WTR YR 1980 MEAN 381.35 MAX 382.79 MIN 378.71

04234000 FALL CREEK NEAR ITHACA, NY

LOCATION.--Lat 42°27'12", long 76°28'23", Tompkins County, Hydrologic Unit 04140201, on left bank in Forest Home, 0.2 mi (0.3 km) east of Ithaca, 0.5 mi (0.8 km) upstream from Cornell University dam, and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--126 mi^2 (326 km^2).

PERIOD OF RECORD.--July 1908 to June 1909 (gage heights only), February 1925 to current year.

REVISED RECORDS.--WSP 874: 1935-38. WSP 1912: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 795.13 ft (242.356 m) National Geodetic Vertical Datum of 1929. July 1908 to June 1909, nonrecording gage at bridge 1.2 mi (1.9 km) downstream at different datum.

REMARKS.--Records good except those for winter periods, which are poor. Diversion from point about 1 mi (2 km) upstream from station by Cornell University for water supply and at several sites for irrigation purposes. Records of diversion from Fall Creek are in files of Cornell University.

AVERAGE DISCHARGE.--55 years (1925-80), 186 ft^3/s (5.268 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,500 ft^3/s (439 m^3/s) July 8, 1935 gage height, 9.52 ft (2.902 m), from average of computed flow over each of four dams; maximum gage height 11.16 ft (3.402 m) Feb. 21, 1971 (ice jam); minimum discharge, about 3 ft^3/s (0.085 m^3/s) Aug. 25, 1927, result of regulation; minimum daily, 3.6 ft^3/s (0.10 m^3/s) Aug. 17, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft^3/s (53.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	0430	*3,110	88.1	*4.52	1.378

Minimum discharge, 14 ft^3/s (0.40 m^3/s) Sept. 9, gage height, 0.34 ft (0.104 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	95	194	160	43	36	738	176	37	179	28	35
2	28	254	177	151	44	38	514	167	39	99	45	26
3	26	503	157	130	41	42	416	246	55	85	204	30
4	26	242	152	100	50	42	401	164	58	67	118	29
5	60	180	146	110	58	45	421	135	44	66	57	26
6	721	155	142	68	48	98	328	123	37	214	38	20
7	256	171	156	80	46	100	273	114	76	112	31	19
8	145	204	151	78	42	320	238	107	135	75	27	17
9	140	157	122	68	41	460	564	103	114	66	25	15
10	152	167	118	64	45	260	1040	99	97	56	24	21
11	113	158	116	82	41	290	514	94	75	46	27	21
12	94	132	116	100	39	140	370	99	58	43	39	17
13	100	121	140	60	36	96	361	114	49	38	41	15
14	105	137	131	110	33	100	328	135	42	34	37	21
15	100	136	100	250	32	100	416	116	40	31	81	67
16	93	133	82	169	31	98	328	95	66	31	101	38
17	81	121	80	138	35	203	277	83	63	29	48	27
18	78	124	72	134	42	1410	257	85	43	27	37	28
19	82	115	98	133	38	583	224	92	37	25	33	27
20	72	106	100	110	47	629	204	81	47	25	29	23
21	64	101	96	82	46	1270	194	73	75	25	27	21
22	57	104	110	100	49	2090	170	69	59	33	23	19
23	58	137	150	92	78	720	156	61	41	58	23	18
24	212	138	280	46	86	551	145	56	34	44	21	19
25	172	245	662	56	68	1040	153	51	28	31	20	18
26	138	550	574	68	47	544	153	49	27	26	18	22
27	116	908	316	70	32	405	137	43	25	24	17	22
28	143	375	243	68	42	439	164	41	29	23	16	20
29	163	276	218	47	28	903	273	40	92	29	17	18
30	124	226	208	44	---	1110	224	38	356	40	21	17
31	105	---	186	48	---	886	---	37	---	37	36	---
TOTAL	3855	6471	5593	3016	1308	15048	9981	2986	1978	1718	1309	716
MEAN	124	216	180	97.3	45.1	485	333	96.3	65.9	55.4	42.2	23.9
MAX	721	908	662	250	86	2090	1040	246	356	214	204	67
MIN	26	95	72	44	28	36	137	37	25	23	16	15
CFSM	.98	1.71	1.43	.77	.36	3.85	2.64	.76	.52	.44	.34	.19
IN.	1.14	1.91	1.65	.89	.39	4.44	2.95	.88	.58	.51	.39	.21

CAL YR 1979 TOTAL 72963 MEAN 200 MAX 3740 MIN 15 CFSM 1.59 IN 21.54
WTR YR 1980 TOTAL 53979 MEAN 147 MAX 2090 MIN 15 CFSM 1.17 IN 15.94

04234500 CANANDIAGUA LAKE AT CANANDAIGUA, NY

LOCATION.--Lat 42°52'19", long 77°16'22", Ontario County, Hydrologic Unit 04140201, at south end of city pier at northern end of Canandaigua Lake, 1 mi (2 km) southeast of Canandaigua.

DRAINAGE AREA.--184 mi² (477 km²).

PERIOD OF RECORD.--November 1939 to current year. December 1927 to November 1939, records for site on west side of E. T. Waldorf's boathouse collected by, and in files of, city of Canandaigua.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. June 26, 1946 to Sept. 30, 1975, at datum 681.17 ft (207.621 m) higher, and prior to June 26, 1946, nonrecording gage at E. T. Waldorf's boathouse at same datum.

REMARKS.--Lake elevation regulated by one gate on West outlet, which is a 1.5 mi (2.4 km) long canal, and by two gates on East outlet, which is the natural outlet. Sill elevations of West and East outflow structures are 684.37 ft (208.596 m) and 684.94 ft (208.770 m), respectively. Water diverted for municipal supply for villages of Newark, Palmyra, and Gorham. Records of diversion in files of city of Canandaigua. Area of water surface, 16.6 mi² (43.0 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 692.11 ft (210.955 m) June 24, 1972; minimum daily, 685.62 ft (208.977 m) Jan. 30, 1942.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 688.87 ft (209.968 m) Apr. 30, May 1, 2; minimum, 686.79 ft (209.334 m) Mar. 4, 5, 6.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	687.32	687.22	687.55	687.87	687.04	686.85	688.70	688.87	688.61	688.48	688.13	687.76
2	687.31	687.16	687.51	687.85	687.02	686.83	688.78	688.85	688.61	688.45	688.13	687.80
3	687.31	687.12	687.49	687.82	686.99	686.82	688.79	688.81	688.62	688.41	688.15	687.p1
4	687.32	687.11	687.47	687.79	686.96	686.80	688.80	688.77	688.60	688.36	688.14	687.79
5	687.33	687.09	687.49	687.75	686.93	686.79	688.78	688.74	688.60	688.34	688.14	687.77
6	687.47	687.08	687.43	687.71	686.91	686.80	688.74	688.70	688.61	688.32	688.14	687.75
7	687.46	687.08	687.42	687.75	686.89	686.80	688.72	688.65	688.61	688.29	688.13	687.72
8	687.43	687.10	687.39	687.64	686.88	686.84	688.71	688.63	688.63	688.28	688.13	687.70
9	687.43	687.09	687.36	687.60	686.88	686.88	688.63	688.62	688.62	688.27	688.11	687.70
10	687.43	687.11	687.33	687.57	686.88	686.88	688.63	688.62	688.59	688.27	688.08	687.67
11	687.44	687.10	687.33	687.66	686.87	687.00	688.63	688.64	688.56	688.28	688.07	687.66
12	687.44	687.09	687.29	687.54	686.87	687.02	688.62	688.63	688.54	688.24	688.07	687.60
13	687.42	687.09	687.25	687.54	686.87	687.03	688.61	688.64	688.53	688.23	688.03	687.59
14	687.42	687.10	687.24	687.51	686.86	687.05	688.60	688.66	688.48	688.23	688.03	687.65
15	687.41	687.12	687.23	687.46	686.86	687.06	688.62	688.68	688.44	688.23	688.01	687.63
16	687.39	687.11	687.23	687.44	686.86	687.07	688.59	688.68	688.44	688.22	687.98	687.66
17	687.38	687.12	687.14	687.45	686.88	687.12	688.56	688.70	688.41	688.21	687.96	687.66
18	687.34	687.11	687.13	687.40	686.88	687.27	688.52	688.75	688.39	688.19	687.96	687.59
19	687.33	687.11	687.12	687.38	686.87	687.34	688nj2	688.73	688.37	688.19	687.93	687.58
20	687.34	687.12	687.11	687.35	686.87	687.42	688.52	688.73	688.43	688.19	687.90	687.59
21	687.33	687.12	687.11	687.32	686.87	687.57	688.52	688.72	688.39	688.19	687.90	687.57
22	687.32	687.13	687.10	687.31	686.88	687.86	688.52	688.73	688.40	688.20	687.88	687.56
23	687.32	687.14	687.07	687.28	686.89	687.99	688.53	688.73	688.39	688.20	687.84	687.57
24	687.35	687.16	687.08	687.25	686.90	688.08	688.54	688.69	688.39	688.18	687.83	687.55
25	687.32	687.18	687.34	687.23	686.90	688.21	688.58	688.63	688.38	688.17	687.80	687.56
26	687.28	687.36	687.72	687.21	686.89	688.23	688.60	688.62	688.40	688.15	687.77	687.53
27	687.25	687.50	687.87	687.17	686.89	688.25	688.61	688.61	688.37	688.15	687.75	687.50
28	687.26	687.55	687.91	687.16	686.88	688.27	688.65	688.60	688.38	688.17	687.75	687.47
29	687.22	687.55	687.91	687.13	686.87	688.31	688.80	688.59	688.44	688.17	687.76	687.47
30	687.20	687.56	687.91	687.09	---	688.43	688.86	688.61	688.51	688.15	687.76	687.47
31	687.19	---	687.89	687.06	---	688.56	---	688.63	---	688.14	687.76	---
MEAN	687.35	687.18	687.40	687.46	686.90	687.40	688.64	688.69	688.49	688.24	687.97	687.63
MAX	687.47	687.56	687.91	687.87	687.04	688.56	688.86	688.87	688.63	688.48	688.15	687.81
MIN	687.19	687.08	687.07	687.06	686.86	686.79	688.52	688.59	688.37	688.14	687.75	687.47

CAL YR 1979 MEAN 688.01 MAX 689.47 MIN 687.07
WTR YR 1980 MEAN 687.78 MAX 688.87 MIN 686.79

04235000 CANANDAIGUA OUTLET AT CHAPIN, NY

LOCATION.--Lat 42°55'05", long 77°13'59", Ontario County, Hydrologic Unit 04140201, on right bank at Chapin, 25 ft (8 m) upstream from bridge on State Highway 488, and 4.1 mi (6.6 km) downstream from Canandaigua Lake.

DRAINAGE AREA.--195 mi^2 (505 km^2).

PERIOD OF RECORD.--November 1939 to current year. Prior to October 1964, published as "Canandaigua Lake Outlet."

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 671.44 ft (204.655 m) National Geodetic Vertical Datum of 1929. Prior to June 25, 1974, at site 0.1 mi (0.2 km) upstream at datum 676.90 ft (206.319 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by Canandaigua Lake (see station 04234500), from which water is diverted for municipal supply by villages of Newark, Palmyra, and Gorham. Monthly runoff adjusted for change in contents in Canandaigua Lake from October 1945 to September 1966.

AVERAGE DISCHARGE.--40 years (1941-80), 155 ft^3/s (4.390 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,710 ft^3/s (48.4 m^3/s) June 24, 1972, gage height, 5.62 ft (1.713 m) site and datum then in use; minimum, 4.6 ft^3/s (0.13 m^3/s) Sept. 17, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 580 ft^3/s (16.4 m^3/s) Dec. 25, Apr. 4, gage height, 5.08 ft (1.548 m); minimum daily, 16 ft^3/s (0.45 m^3/s) Feb. 14, 15; minimum gage height, 2.92 ft (0.890 m) Feb. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	150	194	285	191	112	470	508	25	279	25	44
2	33	146	188	280	195	112	465	505	23	279	28	58
3	34	140	186	273	199	118	474	495	24	264	29	48
4	33	139	185	266	191	58	569	483	23	255	28	40
5	51	123	186	258	189	18	571	441	22	255	30	34
6	95	31	186	251	172	18	558	367	23	255	32	23
7	49	26	204	250	94	19	551	357	29	196	33	22
8	39	26	203	223	37	19	540	247	42	31	37	23
9	40	25	194	229	37	57	526	69	203	20	37	26
10	38	28	187	177	20	146	532	60	180	19	37	28
11	37	25	186	138	17	176	507	63	27	19	36	29
12	36	24	179	169	17	130	439	63	30	17	37	30
13	36	24	172	209	17	102	432	68	134	19	36	32
14	36	26	170	113	16	24	435	71	321	19	38	34
15	35	27	160	183	16	20	533	69	162	21	39	36
16	55	26	160	194	18	20	515	64	321	20	33	34
17	149	24	140	193	25	79	497	68	276	23	32	36
18	154	23	90	188	29	71	438	76	99	24	34	36
19	133	22	160	184	30	39	170	72	26	27	40	34
20	40	22	140	179	17	42	147	64	31	29	42	34
21	33	24	100	172	19	79	137	61	21	19	45	34
22	33	25	62	169	21	88	53	63	19	19	45	34
23	63	28	140	166	25	43	47	85	19	19	47	37
24	167	29	170	100	20	68	48	231	21	29	47	34
25	163	68	475	189	51	301	52	182	23	28	48	34
26	160	134	392	192	97	342	53	57	25	27	48	38
27	156	220	315	162	95	338	54	52	39	25	44	34
28	164	207	305	154	97	324	153	39	36	25	44	33
29	158	202	301	168	97	371	424	23	37	28	52	34
30	151	200	298	160	---	437	444	25	150	25	50	33
31	149	---	290	193	---	446	---	28	---	24	47	---
TOTAL	2553	2214	6318	6067	2049	4217	10834	5056	2411	2339	1200	1026
MEAN	82.4	73.8	204	196	70.7	136	361	163	80.4	75.5	38.7	34.2
MAX	167	220	475	285	199	446	571	508	321	279	52	58
MIN	33	22	62	100	16	18	47	23	19	17	25	22

CAL YR 1979 TOTAL 73428 MEAN 201 MAX 774 MIN 20 CFSM 1.03 IN 14.01
WTR YR 1980 TOTAL 46284 MEAN 126 MAX 571 MIN 16 CFSM .65 IN 8.83

04235250 FLINT CREEK AT PHELPS, NY

LOCATION.--Lat 42°57'28", long 77°04'06", Ontario County, Hydrologic Unit 04140201, on right bank 25 ft (8 m) downstream from bridge on Eagle Street at Phelps, and 1.1 mi (1.8 km) upstream from Canandaigua Outlet.

DRAINAGE AREA.--102 mi² (264 km²).

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 523.14 ft (159.453 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Small diversion (during periods of low ground-water level) by Phelps Cement Products, Inc., located about 0.2 mile (0.3 km) upstream. Since 1967, flow from Canandaigua Lake diverted into Flint Creek for municipal supply of village of Gorham; presently not exceeding 0.3 ft³/s (0.008 m³/s).

AVERAGE DISCHARGE.--21 years, 92.5 ft³/s (2.620 m³/s), 12.32 in/yr (313 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,940 ft³/s (83.3 m³/s) Mar. 30, 1960, gage height, 5.83 ft (1.777 m); maximum gage height, 6.20 ft (1.890 m) Mar. 17, 1963 (ice jam); no flow for many days 1962-65, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s (22.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 26	1900	910	25.8	4.22	1.286	Mar. 22	0300	1,010	28.6	4.35	1.326
Dec. 25	2100	*a1,100	31.2	*b4.49	1.368						

a About.
b Backwater from ice.

Minimum discharge, 1.5 ft³/s (0.042 m³/s) Aug. 28, gage height, 0.93 ft (0.283 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	48	118	120	18	15	663	345	19	61	7.0	3.1
2	9.1	59	94	100	17	14	523	229	19	49	5.3	10
3	9.1	81	78	82	17	14	400	164	19	48	9.7	10
4	9.4	70	76	70	16	16	318	127	20	32	11	8.4
5	28	57	74	60	16	18	278	106	18	27	12	7.8
6	288	50	74	54	15	21	229	91	17	63	9.1	5.3
7	176	53	78	48	15	26	173	83	25	37	6.0	3.7
8	116	64	74	42	15	31	141	73	53	26	5.3	3.0
9	84	59	62	38	15	35	127	65	46	22	4.6	3.0
10	78	63	54	35	14	113	200	61	40	18	3.8	3.7
11	64	62	54	47	14	341	208	57	31	15	4.6	2.7
12	53	54	55	41	14	118	173	56	25	14	4.4	2.7
13	50	50	48	38	14	74	171	58	20	11	4.0	2.8
14	48	53	44	61	14	50	156	67	17	9.1	3.8	7.0
15	49	58	38	60	14	40	285	63	20	8.4	3.7	9.1
16	40	59	32	54	14	39	274	55	64	8.1	4.8	6.2
17	35	56	27	51	14	141	208	48	43	7.3	4.2	7.3
18	32	50	27	53	14	507	164	51	28	6.7	4.4	7.0
19	31	45	35	53	14	345	139	63	22	6.2	4.0	6.0
20	30	44	54	43	16	292	120	54	29	6.2	3.1	6.2
21	27	40	48	36	18	447	106	46	26	6.2	2.7	5.0
22	24	41	45	34	27	835	91	40	22	7.0	2.7	3.8
23	28	44	50	29	58	614	81	35	18	10	2.5	5.0
24	122	44	130	11	44	432	73	32	15	7.3	2.3	3.5
25	91	166	860	19	33	442	77	29	13	5.5	2.3	4.0
26	67	579	800	26	26	341	76	26	11	4.6	2.2	4.6
27	53	590	540	24	22	244	68	24	10	8.7	1.9	3.7
28	71	383	391	22	21	203	226	22	12	7.0	2.0	3.3
29	76	244	251	21	18	353	585	21	26	9.4	1.9	3.1
30	64	156	184	20	---	585	481	20	102	17	2.2	3.1
31	54	---	150	19	---	579	---	20	---	10	3.7	---
TOTAL	1916.6	3422	4645	1411	567	7325	6814	2231	830	567.7	141.2	154.1
MEAN	61.8	114	150	45.5	19.6	236	227	72.0	27.7	18.3	4.55	5.14
MAX	288	590	860	120	58	835	663	345	102	63	12	10
MIN	9.1	40	27	11	14	14	68	20	10	4.6	1.9	2.7
CFSM	.61	1.12	1.47	.45	.19	2.31	2.23	.71	.27	.18	.05	.05
IN.	.70	1.25	1.69	.51	.21	2.67	2.49	.81	.30	.21	.05	.06

CAL YR 1979 TOTAL 42280.0 MEAN 116 MAX 1800 MIN 3.2 CFSM 1.14 IN 15.42
WTR YR 1980 TOTAL 30024.6 MEAN 82.0 MAX 860 MIN 1.9 CFSM .80 IN 10.95

04235396 OWASCO LAKE NEAR AUBURN, NY

LOCATION.--Lat 42°53'56", long 76°32'17", Cayuga County, Hydrologic Unit 04140201, on west side of breakwater at city of Auburn water intake and pumping station, 1 mi (2 km) south of city limits of Auburn, and 1.8 mi (2.9 km) upstream from State dam.

DRAINAGE AREA.--205 mi² (531 km²).

PERIOD OF RECORD.--October 1967 to current year. Records since 1912 collected by, and in files of, city of Auburn.

GAGE.--Nonrecording gage read once daily by employees of city of Auburn Water Division. Datum of gage is National Geodetic Vertical Datum of 1929. Reference mark at elevation 715.48 ft (218.078 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Lake elevation regulated by gates on outlet at State dam. Area of water surface, 10.6 mi² (27.5 km²).

COOPERATION.--Records furnished by city of Auburn.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 716.88 ft (218.505 m) June 25, 1972; minimum observed, 708.58 ft (215.975 m) Feb. 17, 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum observed elevation since 1912, 716.91 ft (218.514 m) Mar. 23, 1936, Apr. 9, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 712.80 ft (217.261 m) Apr. 25; minimum observed, 709.63 ft (216.295 m) Jan. 14.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	711.31	711.90	711.03	711.28	709.90	709.98	712.03	712.50	712.16	712.35	712.58	712.36
2	711.26	711.89	710.90	711.33	709.91	709.98	711.91	712.55	712.15	712.36	712.57	712.35
3	711.23	712.10	710.78	711.36	709.91	709.98	711.78	712.58	712.13	712.38	712.60	712.40
4	711.19	712.20	710.67	710.83	709.91	709.98	711.83	712.60	712.16	712.37	712.60	712.40
5	711.17	712.24	710.60	710.62	709.91	709.96	711.73	712.61	712.18	712.36	712.62	712.38
6	711.74	712.27	710.48	710.47	709.94	710.01	711.80	712.58	712.19	712.58	712.62	712.38
7	712.00	712.26	710.37	710.36	709.94	710.01	711.90	712.54	712.25	712.60	712.61	712.35
8	712.01	712.28	710.28	710.17	709.93	710.01	711.93	712.56	712.34	712.60	712.63	712.32
9	712.04	712.27	710.23	710.08	709.93	710.06	711.91	712.58	712.35	712.60	712.63	712.31
10	712.05	712.18	710.16	710.00	709.92	710.09	712.25	712.60	712.40	712.58	712.63	712.27
11	712.05	712.18	710.20	710.02	709.92	710.19	712.46	712.64	712.34	712.60	712.60	712.28
12	712.08	711.76	710.18	709.80	709.94	710.26	712.41	712.65	712.25	712.60	712.60	712.24
13	712.03	711.56	710.19	709.72	709.91	710.26	712.41	712.70	712.26	712.60	712.58	712.21
14	712.01	711.37	710.20	709.63	709.93	710.31	712.38	712.70	712.26	712.61	712.60	712.27
15	712.00	711.22	710.21	709.68	709.91	710.33	712.46	712.71	712.25	712.60	712.58	712.23
16	711.96	711.06	710.25	709.73	709.93	710.34	712.48	712.70	712.32	712.60	712.57	712.25
17	711.95	710.94	710.19	709.75	709.94	710.36	712.49	712.70	712.36	712.60	712.56	712.28
18	711.92	710.78	710.17	709.78	709.93	710.76	712.55	712.74	712.38	712.58	712.56	712.23
19	711.92	710.66	710.19	709.77	709.94	711.13	712.65	712.74	712.36	712.58	712.52	712.25
20	711.90	710.32	710.17	709.82	709.94	711.34	712.70	712.58	712.44	712.58	712.50	712.24
21	711.87	710.23	710.23	709.81	709.95	711.63	712.75	712.47	712.34	712.56	712.50	712.21
22	711.83	710.16	710.20	709.85	709.95	712.28	712.77	712.33	712.29	712.58	712.48	712.21
23	711.82	710.10	710.17	709.87	709.93	712.48	712.78	712.18	712.18	712.60	712.45	712.20
24	711.87	710.16	710.17	709.88	709.98	712.38	712.78	712.20	712.18	712.57	712.45	712.19
25	711.88	710.16	710.33	709.89	709.96	712.36	712.80	712.18	712.18	712.57	712.42	712.22
26	711.86	710.31	710.66	709.88	709.97	712.33	712.74	712.18	712.18	712.55	712.42	712.15
27	711.85	711.27	710.90	709.88	709.99	712.18	712.65	712.16	712.17	712.55	712.42	712.09
28	711.93	711.35	711.01	709.90	709.99	712.01	712.66	712.16	712.13	712.54	712.38	712.05
29	711.87	711.27	711.13	709.92	709.98	711.88	712.66	712.15	712.18	712.53	712.36	712.00
30	711.88	711.18	711.20	709.90	---	712.08	712.60	712.16	712.25	712.58	712.36	711.97
31	711.88	---	711.25	709.93	---	712.08	---	712.18	---	712.58	712.38	---
MEAN	711.82	711.32	710.47	710.09	709.94	710.94	712.38	712.48	712.25	712.55	712.53	712.24
MAX	712.08	712.28	711.25	711.36	709.99	712.48	712.80	712.74	712.44	712.61	712.63	712.40
MIN	711.17	710.10	710.16	709.63	709.90	709.96	711.73	712.15	712.13	712.35	712.36	711.97

CAL YR 1979 MEAN 711.84 MAX 714.58 MIN 710.05
WTR YR 1980 MEAN 711.59 MAX 712.80 MIN 709.63

04235500 OWASCO OUTLET NEAR AUBURN, NY

LOCATION.--Lat 42°55'48", long 76°35'56", Cayuga County, Hydrologic Unit 04140201, on left bank 2.5 mi (4.0 km) downstream from center of Auburn, and 4 mi (6 km) downstream from State dam at outlet of Owasco Lake.

DRAINAGE AREA.--206 mi^2 (534 km^2).

PERIOD OF RECORD.--November 1912 to current year. Prior to October 1966, published as "Owasco Lake Outlet."

REVISED RECORDS.--WSP 824: 1913-14, 1916, 1920(M), 1922(M), 1928(M), 1929, 1932(M). WSP 2112: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 533.92 ft (162.739 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Diurnal fluctuation caused by mills in Auburn; seasonal regulation at State dam. Diversion from Owasco Lake (see station 04235396) by city of Auburn for municipal water supply; sewage returns to outlet upstream from station.

AVERAGE DISCHARGE.--67 years (1913-80), 290 ft^3/s (8.213 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft^3/s (92.0 m^3/s) June 23, 1972, gage height, 6.28 ft (1.914 m); minimum, about 2 ft^3/s (0.057 m^3/s) Dec. 5, 1936; minimum gage height, 1.16 ft (0.354 m) Aug. 16, 1980; minimum daily discharge, 5 ft^3/s (0.14 m^3/s) Nov. 11, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,370 ft^3/s (38.8 m^3/s) Mar. 24, gage height, 3.51 ft (1.070 m); minimum, 13 ft^3/s (0.37 m^3/s) Aug. 16, gage height, 1.16 ft (0.354 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191	208	760	152	68	88	1260	388	60	60	40	32
2	183	237	713	599	68	91	1220	229	61	66	43	72
3	180	230	685	1060	68	88	861	229	61	56	43	34
4	175	221	650	992	68	91	840	225	60	58	40	32
5	259	235	633	882	61	91	676	229	58	68	48	32
6	250	233	590	809	60	79	357	311	58	52	33	29
7	238	239	574	770	61	76	290	229	79	58	42	28
8	235	237	535	704	74	79	276	74	83	66	43	29
9	238	282	519	704	86	79	295	72	66	70	42	33
10	238	936	281	704	83	86	295	70	246	48	42	29
11	235	1010	152	685	88	86	535	72	351	48	43	28
12	237	947	152	607	86	79	760	70	242	50	33	26
13	235	903	152	574	86	81	741	165	60	43	34	26
14	228	840	152	363	86	79	751	194	60	47	42	34
15	230	799	152	115	88	79	770	191	70	48	34	28
16	229	751	152	139	86	81	760	139	61	47	28	26
17	226	713	145	107	83	93	535	110	60	48	34	30
18	225	685	145	70	93	130	290	115	60	48	33	28
19	223	650	145	66	93	191	225	375	60	54	34	25
20	218	615	145	66	88	259	225	497	172	39	33	25
21	214	574	145	66	86	659	225	574	420	45	34	25
22	216	558	145	66	88	1180	225	566	407	52	33	25
23	224	285	149	66	91	1250	225	246	187	45	33	30
24	218	124	162	66	88	1300	225	86	63	45	32	25
25	215	155	218	66	88	1340	420	86	66	43	33	25
26	213	272	139	63	88	1310	542	79	61	47	33	70
27	207	489	52	61	91	1260	322	70	61	43	33	136
28	219	840	50	63	88	1230	468	60	61	37	37	136
29	208	830	99	68	88	1230	732	60	61	50	33	136
30	209	799	183	68	---	1250	732	61	68	42	36	139
31	206	---	155	68	---	1270	---	60	---	42	29	---
TOTAL	6822	15897	8929	10889	2370	15285	16078	5932	3483	1565	1130	1373
MEAN	220	530	288	351	81.7	493	536	191	116	50.5	36.5	45.8
MAX	259	1010	760	1060	93	1340	1260	574	420	70	48	139
MIN	175	124	50	61	60	76	225	60	58	37	28	25

CAL YR 1979 TOTAL 124725 MEAN 342 MAX 1930 MIN 39
WTR YR 1980 TOTAL 89753 MEAN 245 MAX 1340 MIN 25

04236000 SKANEATELES LAKE AT SKANEATELES, NY

LOCATION.--Lat 42°56'42", long 76°25'46", Onondaga County, Hydrologic Unit 04140201, on east side of breakwater, enclosed in city of Syracuse boathouse, at Skaneateles.

DRAINAGE AREA.--72.7 mi^2 (188 km^2).

PERIOD OF RECORD.--October 1967 to current year. Records since September 1890 collected by, and in files of, city of Syracuse.

GAGE.--Nonrecording gages read once daily by employees of Syracuse Water Division. Datum of gage is National Geodetic Vertical Datum of 1929. October 1967 to September 1975, at same site at datum 801.75 ft (244.373 m) higher.

REMARKS.--Lake elevation regulated by gates at outlet by Syracuse Water Division. Area of water surface, 13.6 mi^2 (35.2 km^2).

COOPERATION.--Records furnished by city of Syracuse.

EXTREMES FOR PERIOD OF RECORD.--(since 1890): Maximum observed elevation, 866.95 ft (264.246 m) June 25, 26, 1972; minimum observed, 858.90 ft (261.793 m) Nov. 15, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 864.16 ft (263.396 m) Apr. 30, May 1; minimum observed, 861.80 ft (262.677 m) Mar. 7, 8.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	862.68	862.55	862.89	862.68	862.25	861.87	863.14	864.16	863.87	863.79	863.41	862.65
2	862.68	862.55	862.84	862.68	862.21	861.87	863.23	864.15	863.85	863.81	863.40	862.65
3	862.67	862.65	862.81	862.67	862.23	861.83	863.29	864.15	863.85	863.81	863.40	862.65
4	862.65	862.63	862.79	862.67	862.19	861.83	863.35	864.15	863.84	863.80	863.36	862.63
5	862.64	862.62	862.79	862.66	862.20	861.82	863.37	864.14	863.82	863.75	863.35	862.62
6	862.85	862.61	862.78	862.65	862.19	861.82	863.37	864.14	863.80	863.81	863.34	862.61
7	862.86	862.64	862.79	862.65	862.18	861.80	863.45	864.14	863.83	863.83	863.31	862.54
8	862.84	862.61	862.79	862.55	862.16	861.80	863.47	864.14	863.83	863.80	863.29	862.49
9	862.83	862.60	862.76	862.55	862.10	861.86	863.47	864.12	863.90	863.80	863.28	862.49
10	862.80	862.63	862.74	862.53	862.10	861.86	863.65	864.10	863.93	863.80	863.27	862.44
11	862.80	862.63	862.73	862.53	862.10	861.86	863.70	864.09	863.95	863.77	863.24	862.42
12	862.78	862.59	862.73	862.51	862.07	861.86	863.77	864.10	863.95	863.75	863.23	862.38
13	862.76	862.63	862.71	862.51	862.06	861.84	863.80	864.09	863.92	863.72	863.19	862.33
14	862.74	862.60	862.71	862.51	862.01	861.84	863.82	864.10	863.90	863.69	863.18	862.30
15	862.73	862.57	862.69	862.49	861.99	861.84	863.87	864.10	863.87	863.67	863.18	862.30
16	862.71	862.57	862.69	862.49	861.97	861.83	863.89	864.10	863.93	863.66	863.12	862.28
17	862.70	862.57	862.60	862.48	861.97	861.82	863.96	864.08	863.91	863.64	863.07	862.28
18	862.70	862.50	862.60	862.48	861.96	861.93	864.00	864.08	863.91	863.62	863.05	862.19
19	862.67	862.49	862.59	862.46	861.97	862.00	864.05	864.08	863.87	863.61	863.00	862.16
20	862.65	862.49	862.59	862.45	861.95	862.05	864.04	864.07	863.87	863.57	862.96	862.13
21	862.65	862.47	862.59	862.45	861.93	862.15	864.05	864.06	863.87	863.55	862.94	862.09
22	862.63	862.47	862.59	862.45	861.93	862.49	864.08	864.05	863.89	863.53	862.89	862.06
23	862.63	862.47	862.55	862.43	861.91	862.57	864.10	864.03	863.87	863.53	862.86	862.04
24	862.66	862.55	862.53	862.40	861.91	862.66	864.10	864.01	863.86	863.50	862.84	862.03
25	862.64	862.40	862.63	862.38	861.91	862.73	864.10	864.00	863.84	863.48	862.81	862.00
26	862.62	862.53	862.70	862.37	861.91	862.79	864.10	863.96	863.82	863.45	862.79	861.98
27	862.61	862.85	862.70	862.35	861.90	862.81	864.07	863.94	863.80	863.43	862.78	861.93
28	862.60	862.90	862.70	862.35	861.90	862.84	864.05	863.92	863.77	863.43	862.74	861.91
29	862.60	862.91	862.69	862.33	861.89	862.85	864.13	863.90	863.77	863.41	862.70	861.84
30	862.58	862.90	862.68	862.31	---	863.10	864.16	863.90	863.79	863.43	862.66	861.81
31	862.56	---	862.68	862.28	---	863.12	---	863.90	---	863.43	862.65	---
MEAN	862.69	862.61	862.70	862.49	862.04	862.17	863.79	864.06	863.86	863.64	863.07	862.27
MAX	862.86	862.91	862.89	862.68	862.25	863.12	864.16	864.16	863.95	863.83	863.41	862.65
MIN	862.56	862.40	862.53	862.28	861.89	861.80	863.14	863.90	863.77	863.41	862.65	861.81

CAL YR 1979 MEAN 863.28 MAX 864.57 MIN 860.95
WTR YR 1980 MEAN 862.95 MAX 864.16 MIN 861.80

04237500 SENECA RIVER AT BALDWINSVILLE, NY

LOCATION.--Lat 43°09'26", long 76°19'56", Onondaga County, Hydrologic Unit 04140201, on left bank 200 ft (61m) downstream from bridge on State Highway 31 in Baldwinsville, and 400 ft (122 m) downstream from navigation dam at Lock 24 of New York State Erie (Barge) Canal.

DRAINAGE AREA.--3,138 mi^2 (8,127 km^2).

PERIOD OF RECORD.--November 1949 to current year in reports of Geological Survey. November 1898 to December 1908, prior to construction of Erie (Barge) Canal, not equivalent to later records at same site because of extensive development of Erie (Barge) Canal system. January 1909 to September 1925 (gage heights only) in reports of State Engineer and Surveyor.

REVISED RECORDS.--WDR NY-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 361.38 ft (110.149 m) Natinal Geodetic Vertical Datum of 1929 (362.60 ft or 110.520 m, Barge Canal Datum). Prior to Dec. 31, 1908, nonrecording gage at same site at different datum. Auxiliary water-stage recorder 1,500 ft (457 m) downstream from base gage at same datum.

REMARKS.--Records fair. Discharge from 1898 to 1908 determined on basis of head on dam, flow through 10 mills nearby, lockages at Oswego Canal lock, estimated leakage of dam, wheel gates, flumes, and penstocks; not adjusted for inflow from Lake Erie through Erie (Barge) Canal. Discharge since November 1949, computed by using fall as determined by auxiliary water-stage recorder, represents total discharge at Baldwinsville and includes flow in Erie (Barge) Canal.

A large amount of natural storage and some artificial regulation is afforded by many large lakes and the Erie (Barge) Canal system in river basin. Large diurnal fluctuations at low and medium flows caused by powerplants upstream from station. Seneca River basin receives water from Erie (Barge) Canal through lock 32 near Pittsford. During part of year, entire flow from 45.5 mi^2 (118 km^2) of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin (see station 01529000).

COOPERATION.--Records of lockages at lock 24 furnished by New York State Department of Transportation (since November 1949).

AVERAGE DISCHARGE.--30 years (1950-80), 3,498 ft^3/s (99.06 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 17,200 ft^3/s (487 m^3/s) Apr. 4, 1960, June 28, 1972; maximum gage height, 9.21 ft (2.807 m) Apr. 4, 1960, June 30, 1972; minimum daily discharge, 237 ft^3/s (6.71 m^3/s) Nov. 10, 1957; minimum gage height, 0.70 ft (0.213 m) Feb. 20, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 9,910 ft^3/s (281 m^3/s) Mar. 23; maximum recorded gage height, 5.60 ft (1.707 m) Mar. 23, 24; minimum daily discharge, 255 ft^3/s (7.22 m^3/s) Feb. 20; minimum gage height, 0.70 ft (0.213 m) Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1670	3230	8300	6990	1100	1360	8390	7800	1080	1410	1140	785
2	1680	2860	8000	6670	1100	693	9360	7000	1120	1720	1300	933
3	1620	3130	7710	6680	1100	716	9810	7400	1220	2220	1160	1070
4	1580	3210	7640	6690	1100	713	9730	7200	1280	2060	1050	1010
5	1690	3100	7560	6580	1060	704	9570	6850	1230	2010	928	1020
6	3130	3030	7480	6430	1050	803	9110	6600	1160	1900	1010	905
7	3630	3230	7390	6380	1030	891	8730	6400	1300	1910	1080	843
8	3250	3790	7350	6270	1020	1060	8370	4000	2160	1930	1240	787
9	3450	4540	7120	6130	1010	1120	8200	2900	3140	1990	1290	775
10	4840	4920	7090	5960	1010	1170	8300	1600	4580	2000	1220	721
11	5750	5160	7000	5980	934	2030	8380	2400	4890	2040	1200	689
12	6020	5500	6710	6030	849	2900	8490	1800	3650	1780	1190	690
13	5830	5300	6530	5340	562	3120	8620	1260	3140	1660	1150	719
14	5480	4880	6480	5680	308	2950	8510	2200	1970	1460	789	756
15	5260	4710	6350	4770	579	2470	8790	3500	861	1160	885	786
16	5000	4200	6310	4360	963	2010	9100	3110	2370	1120	1090	807
17	3860	4500	6230	3780	985	1960	9050	2600	2620	756	1100	827
18	3500	4410	6150	2720	976	2860	8820	2100	2550	639	1020	815
19	3500	4350	5950	2240	627	5290	8250	1300	2070	743	951	801
20	3550	4350	5070	2160	255	6090	7660	600	1920	852	881	803
21	3500	4280	4430	2060	1060	6800	7210	2000	2050	902	851	806
22	3420	4240	4260	1250	1000	9590	5680	3000	2160	906	841	789
23	3750	4220	4230	1600	806	9910	3390	3200	2130	929	816	795
24	2780	3360	4210	1630	866	9870	2290	2590	1820	918	801	752
25	3010	4170	4750	1190	1080	9540	1910	1150	1200	924	773	724
26	2590	4760	7150	1230	1210	8750	2270	1240	1170	927	789	767
27	3110	8010	8270	1260	1210	7960	2560	1900	1030	957	803	733
28	3480	8850	8600	1290	1560	7430	2610	1870	934	922	790	756
29	2950	8830	8520	1300	1580	6710	4240	1870	1030	931	769	744
30	2620	8600	8050	1570	---	6750	6140	1270	1180	955	775	763
31	3270	---	7450	1430	---	7140	---	1120	---	928	775	---
TOTAL	108770	141720	208340	123650	27990	131360	213540	99830	59015	41559	30457	24171
MEAN	3509	4724	6721	3989	965	4237	7118	3220	1967	1341	982	806
MAX	6020	8850	8600	6990	1580	9910	9810	7800	4890	2220	1300	1070
MIN	1580	2860	4210	1190	255	693	1910	600	861	639	769	689

CAL YR 1979 TOTAL 1720725 MEAN 4714 MAX 14200 MIN 421 CFSM 1.50 IN 20.40
WTR YR 1980 TOTAL 1210402 MEAN 3307 MAX 9910 MIN 255 CFSM 1.05 IN 14.35

04238500 ONONDAGA RESERVOIR NEAR NEDROW, NY

LOCATION.--Lat 42°55'51", long 76°10'24", Onondaga County, Hydrologic Unit 04140201, at Onondaga Dam on Onondaga Creek, 3.5 mi (5.6 km) southwest of Nedrow, 4 mi (6 km) south of Syracuse, and 12.6 mi (20.3 km) upstream from Onondaga Lake.

DRAINAGE AREA.--67.7 mi^2 (175 km^2).

PERIOD OF RECORD.--June 1949 to September 1952 (monthly elevations and contents), October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by a rolled earthfill dam, completed by Corps of Engineers in August 1949 for flood control; first used for flood regulation about a year prior to completion. Usable capacity, 18,200 acre-ft (22.5 hm^3) between elevations 457.0 ft (139.29 m), conduit invert at intake, and 504.5 ft (153.77 m), crest of spillway. No dead storage. The flood-control works consist of a pressure conduit and a side-channel spillway and are not provided with gates. Water is stored during high flows and released gradually. Storage includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin.

COOPERATION.--Capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 485.9 ft (148.10 m) Apr. 1, 1960, contents, 5,960 acre-ft (7.35 hm^3); no contents at times.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 473.68 ft (144.378 m) Mar. 22, contents, 1,607 acre-ft (1.98 hm^3); minimum elevation, 459.82 ft (140.153 m) Aug. 28, 29; no contents many days.

Capacity table (elevation, in feet, and contents, in acre-feet)

460.00	0	470.00	700
461.00	5	473.00	1,420
462.00	15	478.00	2,880
464.00	50	482.00	4,230
467.00	225	486.00	6,010

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	460.19	460.46	461.08	460.97	460.37	460.40	464.15	461.49	460.36	460.64	460.32	459.91
2	460.17	461.20	460.99	460.94	460.38	460.35	463.16	461.31	460.39	460.50	461.10	459.90
3	460.15	461.96	460.91	460.80	460.37	460.33	462.63	461.19	460.43	460.53	460.66	460.05
4	460.16	461.23	460.89	460.66	460.39	460.35	462.87	461.08	460.46	460.36	460.42	460.03
5	460.26	460.92	460.85	460.67	460.37	460.47	463.42	461.01	460.37	460.74	460.20	459.96
6	461.81	460.79	460.82	460.53	460.35	461.09	462.59	460.96	460.31	462.21	460.11	459.92
7	461.06	460.77	460.87	460.57	460.36	460.90	462.11	460.94	460.91	460.76	460.06	459.90
8	460.67	460.79	460.82	460.58	460.31	461.03	461.85	460.87	461.91	460.50	460.09	459.87
9	460.60	460.73	460.73	460.54	460.35	461.21	463.28	460.83	461.56	460.47	460.18	459.86
10	460.59	461.05	460.72	460.47	460.35	461.14	466.17	460.80	461.52	460.38	460.03	459.87
11	460.50	460.86	460.72	460.57	460.32	461.75	464.44	460.83	461.07	460.29	459.99	459.88
12	460.44	460.73	460.71	460.80	460.35	461.17	463.04	460.84	460.76	460.23	460.01	459.86
13	460.52	460.67	460.83	460.80	460.34	461.06	463.64	460.88	460.59	460.22	459.99	459.85
14	460.53	460.74	460.72	460.94	460.34	460.94	463.02	461.04	460.48	460.23	459.95	459.87
15	460.47	460.78	460.66	461.50	460.34	460.83	463.67	460.94	460.43	460.19	459.97	459.94
16	460.41	461.00	460.61	461.03	460.33	460.87	463.46	460.78	461.50	460.18	459.96	459.94
17	460.37	460.93	460.62	460.80	460.32	461.46	462.73	460.69	460.73	460.15	459.94	459.93
18	460.36	460.90	460.62	460.79	460.36	467.14	462.36	460.73	460.53	460.13	459.92	460.04
19	460.36	460.79	460.55	460.77	460.33	467.21	462.07	460.80	460.43	460.10	459.91	460.01
20	460.34	460.72	460.56	460.71	460.37	465.39	461.89	460.74	460.68	460.12	459.91	459.97
21	460.31	460.66	460.55	460.62	460.44	467.81	461.76	460.63	460.85	460.14	459.89	459.94
22	460.29	460.65	460.60	460.67	460.49	472.85	461.59	460.58	460.58	460.21	459.87	459.92
23	460.30	460.72	460.91	460.66	460.89	471.99	461.48	460.52	460.43	460.42	459.86	459.95
24	461.04	460.74	461.34	460.60	460.81	468.23	461.40	460.47	460.34	460.25	459.86	459.98
25	460.76	461.14	462.59	460.52	460.78	465.73	461.57	460.43	460.28	460.20	459.85	459.96
26	460.60	461.92	462.75	460.54	460.64	464.16	461.58	460.39	460.24	460.16	459.84	459.95
27	460.52	463.56	461.96	460.54	460.61	463.00	461.37	460.36	460.24	460.10	459.83	459.97
28	460.63	462.33	461.47	460.52	460.52	462.79	461.51	460.34	460.28	460.07	459.83	459.97
29	460.66	461.59	461.29	460.47	460.40	463.84	462.12	460.31	460.55	460.11	459.83	459.94
30	460.56	461.26	461.20	460.44	---	467.09	461.83	460.31	460.78	460.23	459.84	459.93
31	460.49	---	461.07	460.41	---	465.69	---	460.30	---	460.17	459.91	---
MEAN	460.52	461.09	461.00	460.69	460.43	463.49	462.63	460.75	460.67	460.35	460.04	459.94
MAX	461.81	463.56	462.75	461.50	460.89	472.85	466.17	461.49	461.91	462.21	461.10	460.05
MIN	460.15	460.46	460.55	460.41	460.31	460.33	461.37	460.30	460.24	460.07	459.83	459.85
*	2.4	5.9	5.1	2.1	2.4	79.9	8.0	1.5	3.8	1.0	0	0
**	+.02	+.06	-.01	-.05	+.01	+1.26	-1.21	-.11	+.04	-.05	-.02	0

CAL YR 1979 MEAN 461.57 MAX 482.96 MIN 459.95 ** 0
WTR YR 1980 MEAN 460.97 MAX 472.85 MIN 459.83 ** 0

* Contents, in acre-feet, at end of month.
** Change in contents, equivalent in cubic feet per second.

04239000 ONONDAGA CREEK AT DORWIN AVENUE, SYRACUSE, NY

LOCATION.--Lat 42°59'00", long 76°09'04", Onondaga County, Hydrologic Unit 04140201, on left bank 550 ft (168 m) upstream from bridge on Dorwin Avenue, at Syracuse, and 4 mi (6 km) downstream from Onondaga Reservoir.

DRAINAGE AREA.--88.5 mi^2 (229 km^2).

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 414.19 ft (126.245 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for winter periods, which are fair. High flows regulated by Onondaga Reservoir (see station 04238500). Discharge includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin. The adjusted and unadjusted yearly means are the same for each year of record.

AVERAGE DISCHARGE.--29 years, 127 ft^3/s (3.597 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,260 ft^3/s (92.3 m^3/s) July 3, 1974, gage height, 6.48 ft (1.975 m); minimum daily, 5.5 ft^3/s (0.16 m^3/s) Aug. 17, 1965; minimum gage height, 1.15 ft (0.351 m) Sept. 16, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,570 ft^3/s (44.5 m^3/s) Mar. 22, gage height, 5.00 ft (1.524 m); minimum, 16 ft^3/s (0.45 m^3/s) many days; minimum gage height, 1.40 ft (0.427 m) Sept. 9, 12, 13, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	47	102	90	54	48	404	135	46	52	30	18
2	31	118	94	87	54	44	303	120	47	47	73	22
3	30	189	86	76	54	44	253	112	50	48	50	29
4	30	112	85	72	52	46	279	103	50	41	38	22
5	38	85	81	73	54	48	324	95	44	54	30	19
6	183	74	79	66	52	84	250	92	41	151	27	19
7	96	73	83	59	50	74	200	92	85	57	26	17
8	65	75	79	59	48	82	176	86	159	47	28	16
9	60	70	71	56	44	96	306	83	114	44	31	16
10	59	95	70	57	45	91	567	81	112	41	25	19
11	51	81	70	55	48	147	417	81	83	36	23	16
12	47	70	70	83	42	103	292	81	66	35	25	16
13	54	66	80	99	41	92	338	85	54	34	23	16
14	53	71	71	84	42	84	285	99	49	32	22	19
15	48	76	65	136	45	76	335	88	47	31	25	22
16	45	95	61	86	44	92	309	76	93	30	23	18
17	43	87	63	74	42	139	253	70	58	29	22	17
18	43	86	60	73	40	708	220	70	48	29	20	25
19	42	76	58	72	40	659	194	75	43	29	21	20
20	40	70	56	68	41	557	176	70	54	29	22	18
21	39	66	56	61	47	837	163	64	63	29	19	18
22	38	66	58	62	49	1180	147	60	49	33	19	16
23	39	70	82	62	74	952	138	56	42	40	19	20
24	95	73	120	60	68	777	129	53	39	31	19	19
25	71	111	248	60	67	597	147	50	36	29	19	17
26	59	200	259	56	66	429	144	48	35	28	17	19
27	53	343	183	55	60	306	127	46	34	27	17	19
28	60	218	135	56	52	279	142	44	38	25	16	18
29	62	146	118	56	50	425	194	43	50	27	17	16
30	55	117	109	54	---	670	163	42	60	30	19	16
31	50	---	98	56	---	557	---	42	---	26	22	---
TOTAL	1710	3126	2950	2163	1465	10323	7375	2342	1789	1221	787	562
MEAN	55.2	104	95.2	69.8	50.5	333	246	75.5	59.6	39.4	25.4	18.7
MAX	183	343	259	136	74	1180	567	135	159	151	73	29
MIN	30	47	56	54	40	44	127	42	34	25	16	16

CAL YR 1979 TOTAL 53652 MEAN 147 MAX 1670 MIN 21
WTR YR 1980 TOTAL 35813 MEAN 97.8 MAX 1180 MIN 16

04240010 ONONDAGA CREEK AT SPENCER STREET, SYRACUSE, NY

LOCATION.--Lat 43°03'27", long 76°09'46", Onondaga County, Hydrologic Unit 04140201, on right bank 250 ft (76 m) upstream from bridge on Spencer Street in Syracuse, 1,000 ft (305 m) upstream from Erie (Barge) Canal terminal, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--110 mi^2 (285 km^2) revised.

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. September 1970 to current year.

REVISED RECORDS.--WRD NY 1972: 1971(M). WRD NY 1975: 1972(M), 1974(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 362.29 ft (110.426 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. High flows regulated by Onondaga Reservoir (see station 04238500). Discharge includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin. Flow may be affected by backwater from Onondaga Lake at times when the lake elevation exceeds 364.75 ft (111.176 m).

AVERAGE DISCHARGE.--10 years, 213 ft^3/s (6.032 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,740 ft^3/s (77.6 m^3/s) July 3, 1974, gage height, 8.73 ft (2.661 m); minimum, 27 ft^3/s (0.76 m^3/s) Sept. 9, 1980, gage height, 2.23 ft (0.680 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,850 ft^3/s (52.4 m^3/s) Mar. 21, gage height, 7.15 ft (2.179 m); minimum 27 ft^3/s (0.76 m^3/s) Sept. 9, gage height, 2.23 ft (0.680 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	70	140	120	73	72	458	201	76	78	58	34
2	42	162	130	110	73	70	375	189	135	89	108	98
3	42	224	110	98	70	64	335	182	84	73	80	44
4	42	144	110	90	70	64	387	172	80	67	67	36
5	131	112	100	94	72	89	419	162	70	72	58	36
6	221	98	100	84	70	110	341	158	67	174	55	31
7	124	100	110	74	68	104	286	155	131	83	55	28
8	89	96	100	76	68	112	255	150	264	70	61	29
9	81	100	92	70	66	131	422	150	162	67	61	40
10	81	116	88	72	65	127	621	140	149	62	52	32
11	73	104	88	70	68	186	495	130	116	58	52	32
12	67	91	88	100	65	140	406	130	96	57	54	31
13	76	88	100	120	62	114	435	150	86	55	51	32
14	73	91	94	110	62	122	387	151	78	54	49	48
15	67	89	88	170	61	110	452	133	153	54	59	40
16	62	114	86	122	61	98	416	120	124	54	44	33
17	60	110	82	105	61	201	371	112	91	52	41	42
18	58	110	80	105	62	752	326	127	83	51	40	40
19	60	98	76	108	62	651	286	118	76	57	41	36
20	58	88	74	102	65	591	250	114	102	52	41	33
21	56	82	72	92	65	934	242	106	93	62	40	34
22	56	82	74	95	72	1190	232	100	81	81	37	34
23	85	88	110	93	98	926	214	96	73	62	38	73
24	111	94	190	84	96	800	194	93	70	55	38	36
25	93	140	290	84	94	658	221	88	67	52	38	33
26	83	250	310	84	83	495	209	84	64	51	37	37
27	75	410	250	84	70	375	191	86	61	52	37	38
28	83	270	170	83	76	344	229	89	62	47	37	36
29	83	190	150	78	65	523	266	91	72	80	34	32
30	76	160	140	75	---	677	229	83	94	55	36	32
31	72	---	130	81	---	587	---	94	---	52	48	---
TOTAL	2424	3971	3822	2933	2043	11417	9950	3954	2960	2028	1547	1160
MEAN	78.2	132	123	94.6	70.4	368	332	128	98.7	65.4	49.9	38.7
MAX	221	410	310	170	98	1190	621	201	264	174	108	98
MIN	42	70	72	70	61	64	191	83	61	47	34	28

CAL YR 1979 TOTAL 74862 MEAN 205 MAX 2040 MIN 34
WTR YR 1980 TOTAL 48209 MEAN 132 MAX 1190 MIN 28

04240100 HARBOR BROOK AT SYRACUSE, NY

LOCATION.--Lat 43°02'09", long 76°10'55", Onondaga County, Hydrologic Unit 04140201, on left bank 120 ft (36.6 m) upstream from bridge on Holden Street at Syracuse, and 2.6 mi (4.2 km) upstream from mouth (revised).

DRAINAGE AREA.--10.0 mi^2 (25.9 km^2) revised.

PERIOD OF RECORD.--June 1959 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 391.16 ft (119.226 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1978, at site 1,660 ft (506 m) upstream and Oct. 1, 1978 to May 31, 1980, at site 1,800 ft (549 m) upstream at datum 3.63 ft (1.106 m) higher.

REMARKS.--Records poor. Flow includes some sewage and storm sewer inflow, some originating outside the basin.

AVERAGE DISCHARGE.--21 years, 9.24 ft^3/s (0.262 m^3/s) 13.03 in/yr (331 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 726 ft^3/s (20.6 m^3/s) July 3, 1974, gage height, 8.34 ft (2.542 m) datum then in use, from rating curve extended above 180 ft^3/s (5.10 m^3/s) on basis of slope-area measurements of peak flow; minimum, 0.11 ft^3/s (0.003 m^3/s), gage height, 0.77 ft (0.235 m) Aug. 8, 1980 result of regulation.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 64 ft^3/s (1.81 m^3/s) Mar. 22; minimum daily, 2.9 ft^3/s (0.82 m^3/s) Dec. 17, 19-21, result of construction; minimum discharge, 0.11 ft^3/s (0.003 m^3/s), gage height, 0.77 ft (0.235 m) Aug. 8, result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	3.1	3.2	4.2	4.8	4.5	18	7.4	3.8	6.8	3.5	5.5
2	4.2	7.4	3.2	4.2	4.6	4.5	15	7.0	11	9.8	3.9	15
3	3.2	4.2	3.2	4.0	4.5	4.5	18	6.4	6.6	7.2	4.7	5.5
4	3.2	3.8	3.2	4.0	5.4	4.5	17	6.4	6.4	4.6	4.0	3.9
5	9.7	3.4	3.2	3.8	4.6	7.0	15	6.6	6.4	5.1	3.9	4.3
6	6.1	3.2	3.2	3.6	4.1	5.4	13	6.8	6.4	4.6	4.1	3.5
7	3.4	3.8	3.2	3.8	3.6	5.0	13	6.6	10	4.6	3.7	3.2
8	3.2	3.2	3.2	3.8	3.2	5.4	12	6.2	23	5.4	5.5	3.5
9	3.6	4.2	3.2	3.6	3.2	5.4	22	6.0	11	5.0	3.7	5.4
10	3.4	3.6	3.4	3.6	3.1	6.0	21	6.4	8.0	4.6	3.5	4.3
11	3.2	3.4	3.8	3.6	3.1	6.0	15	6.0	7.8	4.5	3.5	3.2
12	3.4	3.2	4.2	3.6	3.2	5.4	17	7.0	6.6	4.1	3.5	3.2
13	4.4	3.6	3.4	3.4	3.3	5.0	16	8.0	5.4	4.0	3.5	3.5
14	3.6	3.6	3.1	6.8	3.2	5.2	14	6.0	4.3	5.2	4.0	6.3
15	3.6	4.0	3.1	5.0	3.1	5.2	22	5.4	15	5.6	4.7	3.9
16	3.6	3.8	3.1	4.9	3.2	5.2	12	5.0	7.0	4.8	3.9	3.2
17	3.4	3.6	2.9	4.8	3.3	10	11	5.0	6.4	3.9	3.9	4.4
18	3.4	3.6	3.1	4.5	3.1	25	10	7.2	5.8	4.0	3.9	3.9
19	3.2	3.6	2.9	3.5	3.1	13	9.4	6.0	5.2	4.6	3.5	3.2
20	3.2	3.6	2.9	3.5	3.5	28	8.8	5.4	8.8	4.8	3.5	3.5
21	3.4	3.4	2.9	3.5	3.6	54	8.6	5.0	5.0	5.1	3.5	3.9
22	3.6	3.8	3.2	3.5	3.5	64	8.4	5.2	4.6	5.8	3.5	3.5
23	4.8	3.6	3.6	3.5	3.6	21	8.0	5.0	4.8	4.4	3.2	7.8
24	3.6	4.2	6.4	3.6	3.5	19	8.6	4.9	5.0	4.2	3.2	4.2
25	3.4	6.7	12	3.5	4.1	26	8.0	4.9	6.0	4.1	3.2	3.9
26	3.1	17	7.9	3.4	4.1	18	8.0	4.9	5.6	3.9	3.2	3.9
27	3.1	7.2	5.8	3.5	4.1	16	8.2	5.8	4.9	4.1	3.2	3.9
28	3.8	4.4	5.1	5.2	4.1	14	9.8	7.0	5.0	4.0	3.9	3.9
29	3.1	3.8	4.6	5.0	4.0	28	8.8	6.0	5.2	8.2	4.2	3.9
30	3.1	3.6	4.4	5.0	---	25	7.4	5.2	7.4	3.9	4.6	3.9
31	3.2	---	4.2	4.8	---	21	---	5.4	---	3.5	5.6	---
TOTAL	117.4	133.6	124.8	126.7	107.8	466.2	383.0	186.1	218.4	154.4	119.7	135.2
MEAN	3.79	4.45	4.03	4.09	3.72	15.0	12.8	6.00	7.28	4.98	3.86	4.51
MAX	9.7	17	12	6.8	5.4	64	22	8.0	23	9.8	5.6	15
MIN	3.1	3.1	2.9	3.4	3.1	4.5	7.4	4.9	3.8	3.5	3.2	3.2
CFSM	.39	.46	.42	.43	.39	1.56	1.33	.62	.76	.52	.40	.47
IN.	.45	.52	.48	.49	.42	1.80	1.48	.72	.84	.60	.46	.52

CAL YR 1979 TOTAL 3522.2 MEAN 9.65 MAX 234 MIN 2.5 CFSM 1.00 IN 13.60
WTR YR 1980 TOTAL 2273.3 MEAN 6.21 MAX 64 MIN 2.9 CFSM .65 IN 8.78

Note.--No gage-height record Jan.15 to June 26.

04240105 HARBOR BROOK AT HIAWATHA BOULEVARD, SYRACUSE, NY

LOCATION.--Lat 43°03'22", long 76°11'07", Onondaga County, Hydrologic Unit 04140201, on left bank 250 ft (76 m) downstream from culvert on Hiawatha Boulevard, in Syracuse, and 3,000 ft (914 m) upstream from mouth.

DRAINAGE AREA.--11.3 mi^2 (29.3 km^2).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. October 1970 to current year.

REVISED RECORDS.--WDR NY-76-1: 1971-75 (P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 365.86 ft (111.514 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow includes some sewage and storm sewer inflow, some originating outside the basin.

AVERAGE DISCHARGE.--10 years, 16.8 ft^3/s (0.476 m^3/s), 20.19 in/yr (513 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 824 ft^3/s (23.3 m^3/s) July 3, 1974, gage height, 7.91 ft (2.411 m), from rating curve extended above 160 ft^3/s (4.53 m^3/s) on basis of step-backwater computations; maximum gage height, 8.15 ft (2.484 m) Sept. 26, 1975 (backwater from Onondaga Lake); minimum discharge, 1.0 ft^3/s (0.028 m^3/s) June 25, 1971; minimum gage height, 0.34 ft (0.104 m) Sept. 20, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 290 ft^3/s (8.21 m^3/s) and maximum (*).

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	0130	*402	11.4	*5.73	1.747	Sept. 2	1745	335	9.49	5.31	1.618

Minimum discharge, 1.2 ft^3/s (0.034 m^3/s) Aug. 8; gage height, 1.59 ft (0.485 m) result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	4.3	5.3	6.2	8.0	8.0	35	12	7.5	8.0	6.2	9.8
2	3.6	14	5.3	5.8	7.7	8.0	29	11	23	15	5.7	40
3	3.4	5.0	5.2	5.8	8.0	8.0	28	11	13	7.7	5.8	7.7
4	3.2	4.2	5.3	5.7	9.3	8.0	36	10	12	5.8	4.3	6.2
5	25	4.3	5.3	5.7	8.2	14	31	10	12	6.8	5.8	9.5
6	9.5	4.3	6.4	5.7	7.7	9.5	26	11	12	5.5	6.8	7.5
7	4.9	5.5	5.7	5.5	6.8	8.7	25	9.8	19	5.8	7.0	7.5
8	4.6	4.3	5.3	5.3	5.0	10	24	9.5	43	6.8	7.5	7.5
9	5.5	7.0	6.6	5.3	5.0	10	43	9.5	18	6.4	4.2	11
10	4.9	5.2	7.0	5.3	4.9	11	41	9.0	14	6.0	4.0	7.5
11	4.9	4.2	5.8	5.5	4.9	11	25	10	13	5.3	4.2	6.6
12	5.0	4.2	6.5	5.5	5.0	9.5	29	8.9	13	5.0	5.7	6.4
13	6.4	5.0	7.7	5.3	5.2	9.0	28	14	10	4.9	6.4	6.4
14	4.4	4.6	8.7	13	5.0	9.3	24	11	7.7	6.6	6.8	12
15	4.9	5.3	9.0	9.5	4.7	9.3	43	9.0	34	7.5	10	6.4
16	4.9	5.2	9.3	9.3	5.0	9.3	24	9.0	14	7.3	6.4	6.0
17	4.7	4.4	8.0	9.3	5.2	19	21	8.5	12	6.8	6.2	9.0
18	4.3	4.4	7.3	7.5	4.7	56	19	12	11	5.8	6.2	6.4
19	4.6	4.3	7.5	5.7	4.7	34	18	8.7	10	6.4	6.2	6.2
20	5.2	4.4	8.5	5.7	5.7	52	17	8.2	17	5.5	6.4	6.0
21	5.3	4.3	8.7	5.7	5.8	104	16	8.0	8.0	11	6.0	6.2
22	5.3	5.2	9.5	5.7	5.7	130	15	8.0	7.3	10	5.3	6.0
23	9.8	4.4	10	5.8	5.8	39	14	8.0	6.8	6.6	3.7	15
24	5.2	6.0	15	5.8	5.7	38	13	7.7	8.2	6.6	3.9	7.0
25	4.6	13	24	5.7	7.7	52	15	7.5	9.3	5.8	5.7	6.8
26	4.6	32	16	5.5	7.7	36	12	7.5	9.3	4.6	5.9	7.7
27	4.7	12	12	5.7	7.7	32	12	9.8	7.5	22	5.7	6.6
28	6.2	7.0	9.5	8.7	7.7	29	22	12	7.0	4.9	6.2	6.6
29	4.3	6.0	6.8	8.5	7.5	59	16	11	6.8	15	6.4	6.8
30	4.3	5.7	6.6	8.5	---	52	13	9.6	11	4.6	7.3	6.8
31	4.3	---	6.2	8.2	---	42	---	10	---	5.8	9.0	---
TOTAL	176.0	199.7	260.0	206.4	182.0	926.6	714	301.2	396.4	231.8	186.9	261.1
MEAN	5.68	6.66	8.39	6.66	6.28	29.9	23.8	9.72	13.2	7.48	6.03	8.70
MAX	25	32	24	13	9.3	130	43	14	43	22	10	40
MIN	3.2	4.2	5.2	5.3	4.7	8.0	12	7.5	6.8	4.6	3.7	6.0
CFSM	.50	.59	.74	.59	.56	2.65	2.11	.86	1.17	.66	.53	.77
IN.	.58	.66	.86	.68	.60	3.05	2.35	.99	1.30	.76	.62	.86

CAL YR 1979 TOTAL 5413.1 MEAN 14.8 MAX 567 MIN 2.5 CFSM 1.31 IN 17.82
WTR YR 1980 TOTAL 4042.1 MEAN 11.0 MAX 130 MIN 3.2 CFSM .97 IN 13.31

04240120 LEY CREEK AT PARK STREET, SYRACUSE, NY

LOCATION.--Lat 43°04'38", long 76°10'14", Onondaga County, Hydrologic Unit 04140201, on left bank 0.2 mi (0.3 km) upstream from bridge on Park Street, and 0.4 mi (0.6 km) upstream from mouth.

DRAINAGE AREA.--29.9 mi² (77.4 km²).

PERIOD OF RECORD.--Occasional measurements water years 1959-72. December 1972 to current year.

REVISED RECORDS.--WDR NY 76-1: 1975 (M).

GAGE.--Water-stage recorder. Datum of gage is 362.76 ft (110.569 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1978, at same site at datum 0.08 ft (0.024 m) higher.

REMARKS.--Records poor. Temporary channel storage intermittently results from backwater caused by Onondaga Lake.

AVERAGE DISCHARGE.--7 years (1974-80), 49.0 ft³/s (1.388 m³/s), 22.25 in/yr (565 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,310 ft³/s or 37.1 m³/s Sept. 26, 1975, gage height, 6.17 ft (1.881 m), from rating curve extended above 530 ft³/s (15.0 m³/s); minimum daily, 1.9 ft³/s (0.054 m³/s) Feb. 6, 7, 1977; minimum gage height, 0.28 ft (0.085 m) Feb. 6-8, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 22	0130	*905	25.6	*3.91	1.192

Minimum daily discharge, 5.2 ft³/s (0.147 m³/s) Apr. 22 (backwater from Onondaga Lake).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	17	9.9	21	15	21	28	46	25	16	11	7.5
2	10	63	33	19	15	23	19	42	73	16	11	88
3	11	47	31	19	14	22	13	29	40	14	13	41
4	11	30	18	22	14	21	36	32	25	11	7.2	11
5	41	25	12	24	14	27	51	31	19	9.9	6.9	9.5
6	86	22	29	20	14	42	18	25	17	12	7.5	9.5
7	29	25	28	17	14	32	13	18	65	9.2	8.2	8.2
8	23	23	29	16	14	35	9.2	16	132	9.2	9.2	8.2
9	28	26	19	13	14	44	86	16	52	11	9.5	8.8
10	23	39	16	12	13	46	173	15	52	9.5	7.8	13
11	20	23	20	13	14	64	46	17	41	8.8	7.5	8.2
12	20	23	20	17	14	45	30	16	27	8.5	8.2	8.2
13	27	24	19	15	13	35	84	28	21	8.2	8.2	8.2
14	26	24	18	34	13	29	32	29	19	8.2	9.2	12
15	23	24	19	25	13	31	68	20	34	8.8	10	9.9
16	20	29	15	20	13	27	70	17	65	9.2	8.5	9.2
17	19	29	14	18	13	87	130	16	27	9.2	7.8	11
18	19	21	14	18	13	289	37	38	21	8.8	7.5	14
19	17	19	13	19	14	160	17	23	20	8.5	7.5	9.2
20	16	19	13	19	20	206	20	19	41	12	7.5	8.5
21	13	18	14	18	24	319	11	18	30	25	7.5	11
22	13	22	16	19	23	660	5.2	17	21	14	7.8	8.8
23	19	23	31	17	30	142	34	17	20	9.9	7.8	34
24	45	28	58	14	28	40	19	17	20	7.5	7.5	12
25	24	65	147	13	31	96	27	17	18	7.2	7.5	9.9
26	20	107	73	16	28	53	22	16	19	6.9	7.8	13
27	19	94	20	16	24	32	19	17	19	8.8	7.8	9.9
28	28	7.8	20	17	23	10	51	17	20	13	8.2	9.2
29	22	6.6	16	16	21	160	86	17	25	39	8.5	8.5
30	19	10	20	14	---	189	53	19	37	9.5	9.2	8.5
31	18	---	26	15	---	46	---	22	---	6.9	9.5	---
TOTAL	719	933.4	830.9	556	513	3033	1307.4	687	1045	355.7	262.3	427.9
MEAN	23.2	31.1	26.8	17.9	17.7	97.8	43.6	22.2	34.8	11.5	8.46	14.3
MAX	86	107	147	34	31	660	173	46	132	39	13	88
MIN	10	6.6	9.9	12	13	10	5.2	15	17	6.9	6.9	7.5
CFSM	.78	1.04	.90	.60	.59	3.27	1.46	.74	1.16	.39	.28	.48
IN.	.89	1.16	1.03	.69	.64	3.77	1.63	.85	1.30	.44	.33	.53

CAL YR 1979 TOTAL 13071.2 MEAN 35.8 MAX 270 MIN 6.6 CFSM 1.20 IN 16.26
WTR YR 1980 TOTAL 10670.6 MEAN 29.2 MAX 660 MIN 5.2 CFSM .98 IN 13.28

04240180 NINEMILE CREEK NEAR MARIETTA, NY

LOCATION.--Lat 42°55'15", long 76°19'47", Onondaga County, Hydrologic Unit 04140201, on right bank 25 ft (8 m) upstream from bridge on Schuyler Road, 0.9 mi (1.4 km) north of Marietta, and 1.8 mi (2.9 km) downstream from Otisco Lake.

DRAINAGE AREA.--45.5 mi^2 (118 km^2).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955, 1963. June 1964 to current year.

REVISED RECORDS.--WRD NY 1971: 1966(M), 1968, 1969.

GAGE.--Water-stage recorder. Datum of gage is 748.25 ft (228.066 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply.

AVERAGE DISCHARGE.--16 years, 42.4 ft^3/s (1.201 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft^3/s (29.2 m^3/s) June 23, 1972, gage height, 8.65 ft (2.637 m); minimum, 0.80 ft^3/s (0.023 m^3/s) Sept. 13, 18, 19, 1966, gage height, 0.61 ft (0.186 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 206 ft^3/s (5.83 m^3/s) Apr. 15, gage height, 4.16 ft (1.268 m); minimum discharge 0.84 ft^3/s (0.02 m^3/s) Sept. 11, 12, 13; minimum gage height, 0.69 ft (0.210 m) Aug. 26, 27, 28, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	4.1	4.6	12	33	8.2	188	50	5.2	2.9	1.8	1.1
2	7.0	13	4.4	18	32	8.2	174	46	5.4	2.8	1.9	1.6
3	7.3	8.6	4.3	33	32	8.2	159	43	5.4	2.5	2.3	1.4
4	7.5	5.5	7.2	33	31	8.2	160	38	4.9	2.2	1.6	1.1
5	14	4.7	12	33	29	8.2	153	34	4.6	4.1	1.5	1.1
6	21	4.4	9.8	33	29	8.2	140	31	4.7	3.3	1.6	1.1
7	8.8	4.9	10	33	29	8.2	131	29	9.4	2.2	1.6	1.0
8	7.7	4.4	9.0	33	27	9.0	115	24	9.7	2.2	2.1	1.0
9	7.9	4.6	8.6	33	27	9.0	123	21	7.3	2.2	1.9	1.0
10	4.9	5.4	8.4	33	27	9.4	174	19	6.0	2.2	1.6	1.2
11	4.0	4.3	8.2	34	26	11	180	20	4.0	2.0	1.6	.90
12	3.9	4.1	8.0	33	21	10	172	17	3.5	1.9	1.7	.90
13	4.7	4.3	7.4	33	8.4	9.4	169	17	3.1	1.9	1.6	.90
14	4.1	4.6	7.2	38	8.2	8.8	164	18	2.8	1.9	1.5	1.6
15	4.0	4.9	7.0	35	8.8	8.2	182	15	3.1	1.8	1.6	1.3
16	3.7	5.9	6.8	34	9.0	8.8	164	14	3.9	1.8	1.4	1.1
17	3.7	4.9	6.8	34	8.4	16	152	14	2.8	1.9	1.3	1.4
18	4.0	4.6	6.6	34	7.9	43	138	19	2.7	1.8	1.4	1.5
19	4.0	4.3	6.8	34	7.9	25	123	12	2.7	1.8	1.4	1.3
20	4.3	4.1	7.0	34	7.7	36	113	11	4.5	1.8	1.4	1.3
21	4.3	3.9	8.4	34	7.9	67	102	10	3.6	1.9	1.3	1.3
22	4.4	4.4	11	34	8.0	42	77	8.8	2.8	2.3	1.2	1.3
23	5.4	4.1	13	34	9.4	25	58	7.7	2.6	2.0	1.2	1.8
24	7.9	4.9	16	34	8.6	41	54	6.8	2.6	1.8	1.2	1.3
25	5.5	8.2	32	34	8.4	70	55	5.5	2.6	1.8	1.1	1.3
26	4.7	29	19	33	8.2	81	54	4.9	2.6	1.8	1.2	1.6
27	4.3	14	15	33	8.2	89	50	4.7	2.7	1.7	1.1	1.5
28	6.2	7.3	14	33	8.0	93	52	4.7	3.0	1.6	1.1	1.3
29	5.0	6.1	13	33	8.8	132	56	4.7	3.1	2.6	1.1	1.3
30	4.3	5.2	13	33	---	179	54	5.4	3.9	1.8	1.1	1.2
31	4.0	---	12	33	---	186	---	5.5	---	1.6	1.2	---
TOTAL	189.5	192.7	316.5	1005	484.8	1266.0	3686	560.7	125.2	66.1	45.6	37.70
MEAN	6.11	6.42	10.2	32.4	16.7	40.8	123	18.1	4.17	2.13	1.47	1.26
MAX	21	29	32	38	33	186	188	50	9.7	4.1	2.3	1.8
MIN	3.7	3.9	4.3	12	7.7	8.2	50	4.7	2.6	1.6	1.1	.90

CAL YR 1979 TOTAL 14065.40 MEAN 38.5 MAX 262 MIN 3.7
WTR YR 1980 TOTAL 7975.80 MEAN 21.8 MAX 188 MIN .90

04240200 NINEMILE CREEK AT CAMILLUS, NY

LOCATION.--Lat 43°02'21", long 76°18'30", Onondaga County, Hydrologic Unit 04140201, on left bank 30 ft (9.1 m) downstream from highway bridge on State Highway 5 (Main Street) in Camillus, and 7.2 mi (11.6 km) upstream from Onondaga Lake.

DRAINAGE AREA.--84.3 mi^2 (218 km^2).

PERIOD OF RECORD.--July 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 398.56 ft (121.481 m) National Geodetic Vertical Datum of 1929. Prior to April 1978 and June to November 1979, at site on right bank 120 ft (36.6 m) downstream at same datum.

REMARKS.--Records fair. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply.

AVERAGE DISCHARGE.--22 years, 115 ft^3/s (3.257 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,760 ft^3/s (78.2 m^3/s) Mar. 30, 1960, gage height, 8.25 ft (2.515 m); maximum gage height, 10.83 ft (3.301 m) Sept. 26, 1975; minimum discharge, 16 ft^3/s (0.45 m^3/s) Sept. 30, Oct. 1, 2, 1961; minimum gage height, 1.02 ft (0.311 m) Aug. 16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,040 ft^3/s (29.5 m^3/s) Mar. 22, gage height, 6.21 ft (1.893 m); minimum daily, 27 ft^3/s (0.76 m^3/s) Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	44	73	77	74	52	322	129	64	46	31	29
2	39	69	70	75	74	50	285	122	72	47	39	50
3	37	84	67	88	75	50	260	118	62	44	40	46
4	37	63	66	85	77	51	275	110	55	39	36	31
5	51	56	71	87	74	55	312	104	52	39	33	30
6	186	53	71	80	74	70	242	100	49	55	32	29
7	77	55	73	84	72	67	220	100	75	44	31	28
8	58	56	71	84	67	66	199	93	120	42	33	27
9	57	54	66	82	70	68	224	90	83	42	32	29
10	54	60	66	79	68	70	390	85	97	41	31	31
11	49	57	65	83	67	97	312	85	71	38	31	29
12	47	54	64	85	68	79	281	85	60	36	31	28
13	50	55	64	79	56	70	324	88	55	35	30	28
14	49	62	61	100	51	71	275	96	51	34	30	31
15	47	59	60	108	50	66	365	88	55	34	37	34
16	44	67	57	90	51	63	301	82	63	34	31	30
17	43	61	56	87	50	92	263	75	50	34	30	30
18	43	59	53	87	50	480	239	83	47	34	30	33
19	43	56	53	87	49	211	216	85	44	33	30	31
20	43	55	56	85	50	244	200	77	55	35	30	30
21	42	53	55	83	53	434	188	74	55	34	29	30
22	41	54	58	84	54	676	167	73	47	34	28	29
23	42	56	72	84	65	190	140	71	43	36	28	42
24	56	57	89	77	66	168	132	71	41	32	28	33
25	51	75	218	79	63	279	129	68	40	31	28	31
26	48	221	178	80	58	220	131	66	39	30	28	32
27	46	357	115	80	54	198	125	66	38	30	28	31
28	50	111	94	79	54	199	134	65	38	31	28	31
29	50	90	88	78	51	290	154	65	41	44	28	30
30	48	79	85	75	---	513	140	65	51	37	30	29
31	47	---	80	74	---	348	---	65	---	31	31	---
TOTAL	1614	2332	2415	2585	1785	5587	6945	2644	1713	1156	962	952
MEAN	52.1	77.7	77.9	83.4	61.6	180	232	85.3	57.1	37.3	31.0	31.7
MAX	186	357	218	108	77	676	390	129	120	55	40	50
MIN	37	44	53	74	49	50	125	65	38	30	28	27

CAL YR 1979 TOTAL 44582 MEAN 122 MAX 1570 MIN 28 CFSM 1.45 IN 19.67
WTR YR 1980 TOTAL 30690 MEAN 83.9 MAX 676 MIN 27 CFSM 1.00 IN 13.54

04240300 NINEMILE CREEK AT LAKELAND, NY

LOCATION.--Lat 43°04'51", long 76°13'36", Onondaga County, Hydrologic Unit 04140201, on left bank 30 ft (9 m) downstream from bridge on State Highway 48, 0.6 mi (1.0 km) downstream from Geddes Brook, and 0.7 mi (1.1 km) upstream from mouth.

DRAINAGE AREA.--115 mi^2 (298 km^2).

PERIOD OF RECORD.--Occasional measurements, water years 1959-70. November 1970 to September 1973, July 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 360.67 ft (109.93 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply.

AVERAGE DISCHARGE.--7 years (1972, 1973, 1976-80), 255 ft^3/s (7.222 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,960 ft^3/s (83.8 m^3/s) Mar. 5, 1979; maximum gage height, 8.75 ft (2.667 m) Sept. 26, 1975; minimum daily discharge, 45 ft^3/s (1.27 m^3/s) Aug. 19, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,640 ft^3/s (46.4 m^3/s) Mar. 22; maximum gage height, 6.87 ft (2.094 m) Mar. 22; minimum daily discharge, 45 ft^3/s (1.27 m^3/s) Aug. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	137	191	165	163	128	515	248	95	95	76	51
2	121	199	201	167	160	126	428	241	135	100	85	111
3	129	226	187	178	160	117	390	230	113	93	90	93
4	125	177	180	183	160	110	384	222	105	88	85	54
5	170	170	163	180	158	126	435	199	99	85	78	48
6	340	151	185	162	162	147	346	178	89	110	74	51
7	219	155	189	155	162	143	326	165	128	100	70	48
8	163	151	205	150	148	146	302	162	211	90	75	47
9	150	151	189	153	155	156	366	146	151	94	73	46
10	145	158	174	141	151	172	588	140	165	92	70	54
11	145	151	176	158	145	232	455	140	138	88	66	46
12	125	143	172	165	156	195	428	140	110	86	64	48
13	130	138	178	150	147	174	468	140	100	84	62	47
14	129	151	172	193	142	176	415	160	96	82	60	55
15	134	156	158	224	133	163	518	140	98	78	70	58
16	138	183	167	178	130	142	435	130	110	76	61	54
17	146	170	162	189	132	205	455	130	100	78	60	52
18	150	167	155	199	129	796	372	120	90	76	52	58
19	141	160	156	203	141	537	340	130	86	74	45	56
20	139	153	146	199	125	522	323	129	105	80	46	48
21	135	148	141	192	123	861	289	122	100	76	47	51
22	133	156	137	188	129	1640	260	120	95	82	50	51
23	126	156	172	180	149	522	230	117	90	90	50	66
24	163	160	224	158	154	402	213	116	88	82	51	60
25	163	211	448	169	153	493	215	106	86	75	47	54
26	151	425	445	170	143	406	211	95	83	75	47	62
27	138	658	262	170	129	354	209	105	82	75	46	52
28	152	257	209	169	134	332	239	103	80	75	47	53
29	164	201	199	160	125	504	274	99	88	105	48	55
30	154	205	193	162	---	810	255	98	105	90	50	55
31	151	---	181	156	---	564	---	94	---	78	55	---
TOTAL	4696	5824	6117	5366	4198	11401	10684	4465	3221	2652	1900	1684
MEAN	151	194	197	173	145	368	356	144	107	85.5	61.3	56.1
MAX	340	658	448	224	163	1640	588	248	211	110	90	111
MIN	121	137	137	141	123	110	209	94	80	74	45	46

CAL YR 1979 TOTAL 89088 MEAN 244 MAX 2960 MIN 90 CFSM 2.12 IN 28.82
WTR YR 1980 TOTAL 62208 MEAN 170 MAX 1640 MIN 45 CFSM 1.48 IN 20.12

04240495 ONONDAGA LAKE AT LIVERPOOL, NY

LOCATION.--Lat 43°06'01", long 76°12'34", Onondaga County, Hydrologic Unit 04140201, on north shore of Onondaga Lake at Onondaga Park Marina basin, 200 ft (61 m) southwest of Onondaga Lake Parkway, and 1.9 mi (3.1 km) upstream from outlet of lake.

DRAINAGE AREA.--285 mi² (738 km²).

PERIOD OF RECORD.--October 1970 to current year. Elevation records, at Barge Canal datum, since February 1927 collected by, and in files of, New York State Department of Transportation at Syracuse.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake elevation regulated by operation of Erie (Barge) Canal. Area of water surface, 4.60 mi² (11.9 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 369.21 ft (112.535 m) June 30, 1972; minimum, 361.54 ft (110.197 m) Mar. 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 365.89 ft (111.523 m) Mar. 23; minimum observed, 361.90 ft (110.307 m) Feb. 20.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	362.62	363.04	364.26	363.26	362.76	362.53	364.66	363.64	362.85	362.88	362.94	362.68
2	362.47	362.86	364.03	363.05	362.70	362.41	364.86	363.79	362.93	362.93	363.04	362.90
3	362.73	362.59	363.84	363.32	362.67	362.28	365.05	363.84	362.98	362.82	362.98	362.91
4	362.84	362.50	363.73	363.44	362.66	362.23	365.19	363.74	363.00	362.82	362.67	362.60
5	362.92	362.80	363.65	363.45	362.63	362.22	365.32	363.61	362.96	362.82	362.56	362.63
6	363.14	363.07	363.52	363.38	362.61	362.26	365.23	363.39	362.86	362.83	362.54	362.64
7	362.80	362.93	363.53	363.30	362.60	362.29	365.03	363.13	362.91	362.81	362.53	362.62
8	363.02	362.93	363.34	363.22	362.57	362.36	364.84	362.88	363.14	362.70	362.58	362.58
9	363.03	363.17	363.14	363.13	362.56	362.41	364.88	362.54	363.14	362.65	362.64	362.56
10	363.10	363.21	363.20	363.02	362.56	362.47	365.27	362.87	363.37	362.96	362.63	362.55
11	363.04	363.22	363.39	363.01	362.53	362.65	365.38	362.94	363.55	363.06	362.62	362.46
12	363.32	363.28	363.33	363.29	362.48	362.89	365.37	362.87	363.28	362.99	362.60	362.75
13	363.36	363.35	363.26	363.26	362.42	362.75	365.46	362.89	363.01	362.88	362.58	362.82
14	363.28	363.30	363.20	363.29	362.25	362.67	365.43	362.94	362.97	362.81	362.52	362.86
15	363.16	363.10	363.16	363.31	362.28	362.49	365.54	363.06	362.68	362.69	362.51	362.89
16	363.05	362.92	362.99	363.06	362.81	362.25	365.57	362.94	362.95	362.61	362.86	362.88
17	362.85	362.91	362.99	362.85	363.03	362.21	365.43	362.76	363.25	362.81	362.96	362.86
18	362.74	362.91	363.14	362.79	363.10	362.97	365.38	362.60	363.05	362.73	362.76	362.90
19	362.69	362.89	363.20	362.69	362.80	363.23	365.19	362.55	362.87	362.64	362.63	362.88
20	362.66	362.86	363.20	362.60	362.06	363.43	364.91	362.92	362.77	362.73	362.64	362.87
21	362.63	362.83	363.16	362.52	362.03	363.83	364.66	363.03	362.77	362.93	362.69	362.89
22	362.62	362.80	363.13	362.47	362.21	365.48	364.25	362.97	362.77	362.84	362.67	362.89
23	362.74	362.82	362.97	362.73	362.31	365.85	363.42	362.95	362.77	362.84	362.69	362.94
24	362.78	362.67	363.03	362.96	362.32	365.70	362.52	362.99	362.72	362.93	362.68	362.90
25	362.71	362.74	363.61	362.91	362.36	365.59	362.50	362.76	362.77	362.94	362.69	362.75
26	362.64	363.17	364.08	362.88	362.43	365.34	362.84	362.58	362.73	362.79	362.68	362.69
27	362.55	364.08	364.21	362.85	362.45	364.96	363.03	362.80	362.72	362.68	362.69	362.66
28	362.64	364.42	364.13	362.84	362.47	364.65	363.17	362.92	362.75	362.63	362.69	362.64
29	362.73	364.53	364.07	362.83	362.57	364.44	363.38	362.96	362.78	362.86	362.69	362.63
30	362.67	364.41	363.91	362.83	---	364.57	363.48	362.81	362.86	362.94	362.69	362.63
31	362.88	---	363.61	362.86	---	364.60	---	362.81	---	362.94	362.69	---
MEAN	362.85	363.14	363.48	363.01	362.53	363.42	364.57	363.02	362.94	362.82	362.69	362.75
MAX	363.36	364.53	364.26	363.45	363.10	365.85	365.57	363.84	363.55	363.06	363.04	362.94
MIN	362.47	362.50	362.97	362.47	362.03	362.21	362.50	362.54	362.68	362.61	362.51	362.46

CAL YR 1979 MEAN 363.44 MAX 368.47 MIN 362.27
WTR YR 1980 MEAN 363.10 MAX 365.85 MIN 362.03

04242500 EAST BRANCH FISH CREEK AT TABERG, NY

LOCATION.--Lat 43°18'06", long 75°37'09", Oneida County, Hydrologic Unit 04140202, on left bank at downstream side of bridge on Main Street at Taberg, just downstream from Furnace Creek, 300 ft (91 m) upstream from bridge on State Highway 69, and 2.8 mi (4.5 km) upstream from confluence of East and West Branches near Blossvale.

DRAINAGE AREA.--188 mi^2 (487 km^2).

PERIOD OF RECORD.--April 1923 to current year.

REVISED RECORDS.--WSP 604: 1924. WSP 759: Drainage area. WSP 1034: 1944. WSP 1054: 1923-45.

GAGE.--Water-stage recorder. Datum of gage is 490.12 ft (149.389 m) National Geodetic Vertical Datum of 1929. Prior to May 20, 1969, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are poor. Diversion above station for municipal supply by cities of Rome and Oneida. Diurnal fluctuation at low flow caused by diversion and small power operations upstream.

AVERAGE DISCHARGE.--57 years, 542 ft^3/s (15.35 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,500 ft^3/s (411 m^3/s) June 22, 1972, gage height, 11.71 ft (3.569 m); minimum, 4.9 ft^3/s (0.14 m^3/s) Aug. 15, 16, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,900 ft^3/s (140 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	0100	7,440	211	7.69	2.344	Apr. 9	2345	*13,000	368	*10.27	3.130

Minimum discharge, 30.0 ft^3/s (0.85 m^3/s) Aug. 26, gage height, 0.41 ft (0.125 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	280	655	230	110	100	1540	823	328	89	277	128
2	103	351	564	210	100	100	1520	602	863	97	263	745
3	97	649	439	171	100	100	1280	651	734	108	305	974
4	93	471	413	134	100	110	1860	498	707	90	179	465
5	95	383	383	120	100	117	2720	402	449	80	152	266
6	633	320	383	100	100	164	1890	345	286	103	86	172
7	772	294	480	100	100	194	1480	321	359	81	229	128
8	529	309	514	100	100	184	1890	305	811	76	174	94
9	539	291	391	110	110	201	5740	265	834	155	224	76
10	584	982	375	130	110	201	8100	265	560	148	226	146
11	400	989	387	150	110	194	2850	260	399	103	150	128
12	355	595	644	300	110	180	1590	274	299	80	115	94
13	616	448	1110	390	120	175	2460	265	240	63	114	77
14	712	453	672	534	120	168	1620	325	196	51	110	218
15	649	408	471	660	120	164	1580	283	172	45	112	445
16	730	387	359	529	120	153	1370	234	213	42	107	280
17	554	335	309	404	110	149	930	201	172	55	89	208
18	466	367	219	359	110	302	739	421	136	51	75	387
19	391	408	200	331	120	448	641	840	114	44	66	308
20	347	363	190	280	120	633	579	538	286	52	63	211
21	383	324	200	227	123	1110	538	355	617	402	55	193
22	335	327	220	211	125	2200	486	274	391	863	48	186
23	284	485	240	206	125	1820	391	224	248	936	45	186
24	439	457	476	150	123	1610	359	181	170	494	41	138
25	616	655	1730	130	122	1690	402	152	128	296	41	108
26	564	2490	2020	140	110	1210	507	125	103	245	37	115
27	434	4860	954	150	110	1100	441	102	85	248	55	196
28	359	1790	519	150	110	1100	469	93	75	248	51	211
29	355	1140	462	150	100	1460	1860	85	78	290	53	155
30	375	841	413	140	---	1950	1420	80	84	533	92	125
31	327	---	280	120	---	2030	---	103	---	406	198	---
TOTAL	13249	22452	16672	7116	3238	21317	49252	9892	10137	6574	3832	7163
MEAN	427	748	538	230	112	688	1642	319	338	212	124	239
MAX	772	4860	2020	660	125	2200	8100	840	863	936	305	974
MIN	93	280	190	100	100	100	359	80	75	42	37	76
‡	25.2	25.0	25.4	25.6	27.5	27.4	24.5	25.7	26.9	27.5	28.8	26.6

CAL YR 1979 TOTAL 218815 MEAN 599 MAX 5630 MIN 18 ‡ 26.9
WTR YR 1980 TOTAL 170894 MEAN 467 MAX 8100 MIN 37 ‡ 26.4

‡ Diversion, in cubic feet per second, by cities of Roue and Oneida for water supply. (Data supplied by respective cities).

04243500 ONEIDA CREEK AT ONEIDA, NY

LOCATION.--Lat 43°05'51", long 75°38'22", Oneida County, Hydrologic Unit 04140202, on right bank 70 ft (21 m) upstream from bridge on Sconondoa Street at Oneida, and 500 ft (152 m) downstream from Sconondoa Creek.

DRAINAGE AREA.--113 mi² (293 km²).

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WDR NY-78-1: 1951, 1956, 1958, 1961, 1963, 1964, 1972, 1976 (P).

GAGE.--Water-stage recorder. Datum of gage is 409.33 ft (124.764 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation by small mills upstream from station.

AVERAGE DISCHARGE.--31 years, 167 ft³/s (4.729 m³/s), 20.07 in/yr (510 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft³/s (314 m³/s) Oct. 9, 1976, gage height, 15.01 ft (4.575 m); minimum 12 ft³/s (0.34 m³/s) Aug. 5, 6, 1962, Oct. 28, 1964; minimum gage height 1.30 ft (0.396 m) Aug. 3, 6, 1955, Aug. 17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft³/s (53.8 m³/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft³/s)	(m³/s)	(ft)	(m)	Date	Time	(ft³/s)	(m³/s)	(ft)	(m)
Nov. 26	2300	2,040	57.7	8.24	2.512	Apr. 9	2300	2,170	61.5	8.69	2.649
Mar. 22	0130	* 3,140	88.9	*10.52	2.649						

Minimum discharge, 24 ft³/s (0.68 m³/s) Sept. 28, 29, 30; minimum gage height, 1.57 ft (0.479 m) Aug. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	45	120	96	64	39	490	210	51	74	33	28
2	30	118	108	94	62	38	394	171	57	65	36	46
3	29	244	96	81	62	37	321	155	60	64	37	49
4	33	130	92	80	60	38	398	134	57	51	37	33
5	32	93	89	78	60	39	485	123	51	50	33	31
6	100	78	86	76	60	40	311	116	48	116	31	33
7	65	73	94	74	60	45	241	113	93	63	30	28
8	51	71	89	74	58	50	210	107	171	51	30	27
9	53	70	78	74	54	54	796	103	111	51	29	27
10	54	99	77	74	52	52	1150	100	102	46	28	30
11	48	87	77	74	49	50	596	97	77	43	29	28
12	45	78	79	74	49	49	418	97	64	39	31	26
13	48	71	93	76	49	49	434	111	56	37	30	27
14	49	81	85	347	48	48	349	128	51	37	29	30
15	49	78	82	366	47	48	672	110	52	36	37	33
16	48	87	79	145	47	50	531	94	165	37	33	29
17	43	78	107	108	47	120	371	86	81	37	30	29
18	41	78	93	102	47	800	298	93	63	42	30	41
19	40	74	90	97	48	739	244	92	56	35	30	30
20	37	70	86	87	48	878	210	85	73	36	33	28
21	35	66	84	79	48	1610	196	78	89	51	30	28
22	36	66	100	87	47	1830	171	74	68	113	28	28
23	38	71	155	82	46	871	155	69	58	74	28	31
24	92	81	244	82	44	672	141	64	53	51	27	28
25	74	125	422	78	43	887	135	62	49	39	27	26
26	60	618	292	76	42	619	128	57	47	36	26	26
27	55	832	191	74	42	468	118	56	46	36	26	26
28	54	308	145	72	41	470	149	54	47	37	27	24
29	56	191	134	70	40	840	658	52	51	39	28	24
30	47	143	125	68	---	1010	311	52	107	42	28	24
31	37	---	107	66	---	672	---	50	---	37	30	---
TOTAL	1509	4304	3799	3111	1464	13212	11081	2993	2154	1565	941	898
MEAN	48.7	143	123	100	50.5	426	369	96.5	71.8	50.5	30.4	29.9
MAX	100	832	422	366	64	1830	1150	210	171	116	37	49
MIN	29	45	77	66	40	37	118	50	46	35	26	24
CFSM	.43	1.27	1.09	.89	.45	3.77	3.27	.85	.64	.45	.27	.27
IN.	.50	1.42	1.25	1.02	.48	4.35	3.65	.99	.71	.52	.31	.30

CAL YR 1979 TOTAL 73531 MEAN 201 MAX 5210 MIN 24 CFSM 1.78 IN 24.21
WTR YR 1980 TOTAL 47031 MEAN 129 MAX 1830 MIN 24 CFSM 1.14 IN 15.48

04245000 LIMESTONE CREEK AT FAYETTEVILLE, N.Y.

LOCATION.--Lat 43°01'48", long 76°00'49", Onondaga County, Hydrologic Unit 04140202, on left bank 100 ft (30 m) downstream from bridge on Genesee Street at Fayetteville, and 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.--85.5 mi^2 (221 km^2), not including 14.0 mi^2 (36.3 km^2) of Middle Branch Tioughnioga Creek basin, flow from which may be completely diverted into Limestone Creek basin through DeRuyter Reservoir, and 0.8 mi^2 (2.07 km^2) in closed basin.

PERIOD OF RECORD.--November 1939 to current year.

REVISED RECORDS.--WSP 954: 1941. WSP 1912: 1958 (M).

GAGE.--Water-stage recorder. Datum of gage is 427.73 ft (130.372 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Canal diverts water from Limestone Creek about 3 mi (5 km) above station and returns water to creek about 400 ft (122 m) above station. Flow regulated by DeRuyter Reservoir.

AVERAGE DISCHARGE.--40 years (1941-80), 143 ft^3/s (4.050 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,010 ft^3/s (199 m^3/s) Mar. 28, 1950, gage height, 7.78 ft (2.371 m), from rating curve extended above 3,500 ft^3/s (99.1 m^3/s); maximum gage height, 8.66 ft (2.640 m) July 3, 1974; minimum discharge, 1.4 ft^3/s (0.040 m^3/s) Aug. 19, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft^3/s (42.5 m^3/s) and maximum (*):

		Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Mar. 22	0130	*3,240	91.8	*6.98	2.128

Minimum discharge, 17 ft^3/s (0.48 m^3/s) Aug. 29, gage height, 1.47 ft (0.448 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	54	139	98	64	58	317	112	49	55	31	22
2	31	141	127	98	62	56	261	102	47	49	37	35
3	29	245	116	81	60	54	224	96	55	49	40	33
4	31	123	116	70	58	51	271	86	57	41	36	26
5	36	96	112	68	56	51	302	82	47	55	31	24
6	151	84	110	66	55	73	206	81	41	189	31	22
7	70	88	112	65	55	73	176	79	70	67	27	21
8	52	94	104	67	52	84	158	77	158	52	27	21
9	54	82	90	65	52	125	412	73	104	52	26	20
10	57	121	90	60	52	114	806	72	121	46	25	22
11	49	98	88	65	49	171	361	70	90	41	25	21
12	46	82	88	92	51	136	278	70	68	41	25	20
13	54	79	108	63	49	100	324	73	55	37	25	20
14	57	88	94	98	49	112	261	88	49	35	24	25
15	57	90	86	166	49	88	306	77	67	34	32	25
16	51	114	81	94	52	86	248	67	230	33	25	22
17	48	100	78	86	49	161	218	60	90	32	25	24
18	46	110	72	84	48	951	201	62	65	31	24	31
19	46	94	72	82	48	648	173	67	57	29	22	26
20	43	84	70	77	51	594	158	62	72	31	22	25
21	42	84	72	67	57	1290	151	55	92	31	24	25
22	41	86	77	77	62	1880	134	54	68	38	21	24
23	43	92	110	73	77	566	125	51	54	46	21	27
24	127	98	166	72	77	377	118	48	48	35	21	25
25	86	151	268	70	72	570	123	47	43	31	20	25
26	70	392	204	68	65	373	121	44	42	28	20	27
27	62	643	156	64	63	292	106	42	40	27	20	26
28	68	265	127	62	62	292	121	42	41	31	20	25
29	70	189	125	62	60	506	181	42	47	31	19	25
30	62	158	121	70	---	668	132	41	60	32	20	24
31	57	---	106	67	---	408	---	40	---	29	22	---
TOTAL	1767	4225	3485	2397	1656	11008	6973	2062	2127	1358	788	738
MEAN	57.0	141	112	77.3	57.1	355	232	66.5	70.9	43.8	25.4	24.6
MAX	151	643	268	166	77	1880	806	112	230	189	40	35
MIN	29	54	70	60	48	51	106	40	40	27	19	20

CAL YR 1979 TOTAL 54472 MEAN 149 MAX 2980 MIN 21
WTR YR 1980 TOTAL 38584 MEAN 105 MAX 1880 MIN 19

04245200 BUTTERNUT CREEK NEAR JAMESVILLE, NY

LOCATION.--Lat 42°56'02", long 76°03'44", Onondaga County, Hydrologic Unit 04140202, on left bank 15 ft (5 m) downstream from bridge on Walberger Road, 125 ft (38 m) downstream from Stebbins Gulf, 2.2 mi (3.5 km) upstream from Jamesville Reservoir, and 4 mi (6 km) south of Jamesville.

DRAINAGE AREA.--32.2 mi^2 (83.4 km^2).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955-58. July 1958 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.93 ft (218.825 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--22 years, 50.8 ft^3/s (1.439 m^3/s), 21.42 in/yr (544 mm/yr).

EXTREMES FOR PERIOD OF RECORD.-Maximum discharge, 2,820 ft^3/s (79.9 m^3/s) July 3, 1974, gage height, 7.84 ft (2.390 m); maximum gage height, 8.38 ft (2.554 m) Oct. 17, 1977; minimum discharge, 2.0 ft^3/s (0.057 m^3/s) Sept. 27, 1959, gage height, 2.26 ft (0.689 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft^3/s (15.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 21	2330	*887	25.1	*7.63	2.326

Minimum discharge, 4.3 ft^3/s (0.12 m^3/s) Aug. 27, 28, gage height, 4.93 ft (1.503 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	18	49	35	24	20	135	43	17	14	13	5.6
2	8.4	74	44	35	23	21	113	39	16	13	24	7.8
3	8.4	75	41	30	23	19	97	36	18	12	19	9.6
4	8.4	44	40	28	23	18	109	33	17	9.6	13	6.3
5	16	35	39	29	22	25	108	32	14	36	9.1	5.9
6	93	31	37	25	21	30	83	31	13	40	8.2	5.6
7	32	33	40	24	20	24	71	31	29	18	7.4	4.9
8	20	31	36	23	20	33	65	30	47	14	8.2	4.9
9	21	31	31	23	19	37	174	30	26	13	7.4	4.9
10	19	46	31	24	19	35	237	28	30	12	6.7	5.9
11	17	35	31	24	20	52	125	29	22	10	6.7	4.9
12	16	29	33	29	19	40	109	27	18	10	7.0	4.6
13	18	28	39	26	18	47	113	30	16	8.7	6.3	4.9
14	18	31	32	53	17	43	103	33	14	8.2	6.3	7.4
15	16	33	29	53	17	39	108	28	16	7.8	7.0	7.8
16	15	40	28	33	17	36	91	25	40	7.4	6.3	5.9
17	13	35	28	30	17	74	79	23	20	7.0	5.9	6.3
18	14	37	28	30	17	264	75	25	15	7.0	5.6	9.1
19	13	32	29	29	17	159	65	25	13	6.3	5.9	6.7
20	13	31	30	27	18	212	61	23	20	6.7	6.3	6.3
21	13	29	28	27	19	560	57	21	21	7.4	5.2	6.3
22	12	29	29	26	19	570	52	20	15	11	4.9	5.9
23	15	30	39	26	26	203	49	19	13	13	5.2	7.4
24	47	40	56	28	22	164	47	18	11	8.2	4.9	6.3
25	30	55	83	27	21	221	52	17	10	6.7	4.6	5.6
26	23	119	67	26	21	141	47	16	9.1	6.3	4.6	6.7
27	20	134	53	25	20	121	44	16	9.1	6.3	4.6	6.7
28	25	79	46	24	20	119	54	15	10	5.9	4.6	5.9
29	23	64	44	24	19	203	61	14	14	7.4	4.9	5.2
30	20	55	43	23	---	230	48	14	18	7.4	7.8	5.2
31	18	---	39	23	---	166	---	14	---	6.3	7.4	---
TOTAL	633.6	1383	1222	889	578	3926	2632	785	551.2	346.6	238.0	186.5
MEAN	20.4	46.1	39.4	28.7	19.9	127	87.7	25.3	18.4	11.2	7.68	6.22
MAX	93	134	83	53	26	570	237	43	47	40	24	9.6
MIN	8.4	18	28	23	17	18	44	14	9.1	5.9	4.6	4.6
CFSM	.63	1.43	1.22	.89	.62	3.94	2.72	.79	.57	.35	.24	.19
IN.	.73	1.60	1.41	1.03	.67	4.54	3.04	.91	.64	.40	.27	.22

CAL YR 1979 TOTAL 19111.5 MEAN 52.4 MAX 1030 MIN 4.7 CFSM 1.63 IN 22.08
WTR YR 1980 TOTAL 13370.9 MEAN 36.5 MAX 570 MIN 4.6 CFSM 1.13 IN 15.45

04245236 MEADOW BROOK AT HURLBURT ROAD, SYRACUSE, NY

LOCATION.--Lat 43°02'30", long 76°06'02", Onondaga County, Hydrologic Unit 04140202, on right bank 170 ft (52 m) downstream from culvert at intersection of Hurlburt Road and Meadowbrook Drive, and 2.3 mi (3.7 km) upstream from mouth.

DRAINAGE AREA.--2.90 mi^2 (7.51 km^2).

PERIOD OF RECORD.--December 1970 to March 1973, April 1973 to September 1978 (peak discharge only), October 1978 to current year.

GAGE.--Water-stage recorder and artificial control. Altitude of gage is 525 ft (160 m), from topographic map.

REMARKS.--Records fair except those below 2.0 ft^3/s (0.057 m^3/s), which are poor. Flow includes storm sewer inflow, some originating outside the basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 475 ft^3/s (13.5 m^3/s) July 3, 1974, gage height 4.82 ft (1.469 m), on basis of culvert measurement of peak flow; minimum, 0.02 ft^3/s (0.001 m^3/s) Sept. 11, 1972; minimum gage height, 0.27 ft (0.082 m) Oct. 8, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 100 ft^3/s (2.82 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
June 15	1715	*138	3.91	*3.05	0.930

Minimum discharge, 0.22 ft^3/s (0.006 m^3/s) Aug. 25, 26, 27, 28, gage height, 0.99 ft (0.302 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.42	.64	.42	.52	.76	2.9	2.7	1.4	1.2	.52	.64	.64
2	.42	7.9	.52	.52	.74	2.9	2.4	1.4	3.7	.64	.79	6.9
3	.42	2.0	.34	.52	.74	2.2	2.1	1.4	1.7	.49	.79	1.4
4	.34	.96	.34	.52	.72	1.8	4.8	1.4	.79	.48	.34	.27
5	6.9	.79	.34	.64	.70	4.1	2.5	1.4	.64	.48	.34	.52
6	6.2	.79	.42	.52	.70	3.3	2.1	1.4	.42	.41	.64	.34
7	.96	1.8	.64	.52	.72	1.8	1.8	1.4	3.1	.43	.79	.34
8	.79	.96	.42	.64	.74	2.1	2.0	1.4	7.6	.46	.96	.34
9	1.4	1.7	.52	.64	.80	2.7	8.7	1.4	2.5	.49	.79	1.4
10	.79	1.7	.64	.52	.88	4.1	5.4	1.4	1.4	.45	.34	1.2
11	.42	.64	.64	.64	.96	4.6	2.4	2.1	.96	.43	.34	.52
12	.52	.52	1.4	.64	1.2	4.1	3.9	1.7	.79	.39	.34	.42
13	1.2	.52	1.0	.64	1.2	2.0	3.1	3.2	.79	.39	.34	.42
14	.96	.42	.79	4.8	.96	2.2	3.1	2.2	.79	.44	.42	3.5
15	.52	.79	.79	1.2	.96	2.1	4.1	1.4	9.5	.50	1.4	1.2
16	.52	.96	.79	.79	.94	2.1	2.9	1.4	3.7	.58	.42	.42
17	.52	.42	.79	.79	.92	8.7	2.2	1.4	.96	.54	.34	1.4
18	.52	.42	.79	.79	.90	16	2.1	2.7	.96	.48	.34	.96
19	.52	.42	.64	.79	1.2	4.6	1.8	1.2	.64	.45	.34	.52
20	.64	.42	.64	.79	1.6	5.6	2.1	.96	2.7	.44	.34	.34
21	.64	.34	.79	.79	2.0	13	1.8	.96	.96	.46	.34	.42
22	.64	.42	.96	.79	2.1	14	1.7	.79	.52	.52	.34	.34
23	3.1	.52	1.8	.76	2.7	3.3	1.4	.79	.42	.52	.34	3.9
24	2.9	2.2	4.8	.72	2.0	3.3	1.4	.64	.42	.42	.27	.79
25	.79	4.8	7.9	.70	2.0	4.6	2.9	.64	.42	.34	.22	.64
26	.64	7.2	2.5	.79	1.7	2.9	2.0	.64	.42	.34	.22	.79
27	.64	2.1	1.2	.96	1.7	3.1	1.8	.64	.42	.34	.22	.52
28	1.8	.79	.79	.79	1.7	2.2	3.9	.52	.64	.34	.22	.52
29	.79	.64	.64	.79	2.2	10	3.3	.42	.79	1.2	.27	.52
30	.64	.52	.52	.79	---	6.5	1.8	.42	1.4	.52	.34	.52
31	.64	---	.52	.78	---	3.7	---	2.2	---	.34	1.2	---
TOTAL	38.20	44.30	35.29	26.09	36.44	146.5	84.2	40.92	51.25	14.83	15.02	32.01
MEAN	1.23	1.48	1.14	.84	1.26	4.73	2.81	1.32	1.71	.48	.48	1.07
MAX	6.9	7.9	7.9	4.8	2.7	16	8.7	3.2	9.5	1.2	1.4	6.9
MIN	.34	.34	.34	.52	.70	1.8	1.4	.42	.42	.34	.22	.27
CFSM	.42	.51	.39	.29	.43	1.63	.97	.46	.59	.17	.17	.37
IN.	.49	.57	.45	.33	.47	1.88	1.08	.52	.66	.19	.19	.41

CAL YR 1979 TOTAL 839.77 MEAN 2.30 MAX 34 MIN .22 CFSM .79 IN 10.77
WTR YR 1980 TOTAL 565.05 MEAN 1.54 MAX 16 MIN .22 CFSM .53 IN 7.25

04246000 ONEIDA LAKE AT BREWERTON, NY

LOCATION.--Lat 43°14'25", long 76°08'30", Onondaga County, Hydrologic Unit 04140202, at west end of Oneida Lake, 100 ft (30 m) west of bridge on U.S. Highway 11, at Brewerton.

DRAINAGE AREA.--1,382 mi² (3,579 km²), at dam at Caughdenoy.

PERIOD OF RECORD.--November 1951 to current year. April 1904 to September 1925 in reports of State Engineer and Surveyor, published as "Oneida River at Brewerton."

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (1.01 ft or 0.308 m, Barge Canal datum). November 1951 to September 1975, at datum 360.99 ft (110.030 m) higher.

REMARKS.--Elevation of lake surface regulated by taintor-gate dam on Oneida River at Caughdenoy and gates on Oneida Canal and Erie (Barge) Canal. Lake volume below 369 ft (112 m) elevation, 49,600 mil ft³ (1,404 hm³). Area of water surface, 79.8 mi² (207 km²); axes, 20.9 mi (33.6 km) by 5.5 mi (8.8 km); shoreline length, 54.7 mi (88.0 km).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 372.83 ft (113.639 m) June 26, 1972; minimum daily, 366.41 ft (111.682 m) Feb. 18, 19, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1936, reached a stage of 373.5 ft (113.84 m) above mean sea level, from Corps of Engineers report "Flood Plain Information, Oneida Creek, New York."

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 371.65 ft (113.279 m) Apr. 14; minimum, 366.46 ft (111.697 m) Mar. 5, 6.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	369.30	369.36	369.77	368.30	367.18	366.55	370.04	369.67	369.68	369.86	370.05	369.61
2	369.30	369.26	369.64	368.23	367.14	366.53	370.09	369.76	369.84	369.84	370.01	369.75
3	369.39	369.31	369.57	368.16	367.10	366.52	370.10	369.75	369.92	369.84	370.02	369.89
4	369.32	369.37	369.39	368.10	367.07	366.49	370.12	369.75	369.98	369.82	370.05	369.98
5	369.35	369.45	369.42	368.01	367.03	366.49	370.05	369.77	370.07	369.81	370.07	369.90
6	369.36	369.44	369.28	367.95	367.00	366.50	370.27	369.74	370.15	369.70	369.98	369.84
7	369.41	369.34	369.18	367.88	366.96	366.50	370.36	369.72	370.22	369.75	369.97	369.78
8	369.42	369.36	368.78	367.80	366.93	366.53	370.32	369.69	370.02	369.78	369.95	369.72
9	369.61	369.34	368.96	367.73	366.90	366.55	370.42	369.63	370.31	369.76	369.90	369.66
10	369.63	369.23	368.98	367.69	366.86	366.58	370.76	369.71	370.24	369.76	369.94	369.54
11	369.61	369.29	368.83	367.64	366.84	366.60	371.11	369.74	370.12	369.73	369.92	369.46
12	369.61	369.21	368.70	367.44	366.81	366.64	371.20	369.74	370.01	369.69	369.82	369.48
13	369.44	369.24	368.70	367.58	366.80	366.68	371.14	369.75	369.96	369.70	369.79	369.53
14	369.38	369.12	368.63	367.57	366.77	366.72	371.42	369.75	369.96	369.71	369.82	369.45
15	369.39	369.12	368.63	367.59	366.75	366.72	371.12	369.75	369.94	369.70	369.75	369.46
16	369.40	369.04	368.53	367.63	366.74	366.74	371.01	369.79	369.93	369.68	369.71	369.50
17	369.39	369.06	368.34	367.65	366.73	366.74	370.99	369.82	369.92	369.67	369.72	369.45
18	369.32	369.08	368.38	367.60	366.72	366.79	370.88	369.91	369.86	369.71	369.74	369.44
19	369.37	369.13	368.48	367.55	366.70	366.97	370.77	369.87	369.82	369.73	369.65	369.43
20	369.27	369.07	368.33	367.51	366.67	367.12	370.62	369.88	369.80	369.73	369.67	369.46
21	369.22	369.07	368.21	367.52	366.64	367.40	370.45	369.85	369.81	369.80	369.77	369.43
22	369.19	369.07	368.10	367.54	366,65	367.92	370.32	369.77	369.88	369.87	369.67	369.41
23	369.21	369.07	368.04	367.45	366.62	368.41	370.18	369.74	369.92	369.89	369.58	369.38
24	369.16	369.04	368.03	367.44	366.62	368.74	370.05	369.73	369.91	369.95	369.57	369.45
25	369.13	369.13	368.16	367.43	366.61	369.01	369.94	369.69	369.92	369.96	369.59	369.53
26	369.19	369.26	368.29	367.39	366.59	369.21	369.82	369.62	369.91	369.94	369.59	369.21
27	369.30	369.53	368.39	367.36	366.59	369.33	369.77	369.61	369.87	369.97	369.58	369.31
28	369.39	369.75	368.38	367.34	366.57	369.43	369.81	369.61	369.89	370.00	369.56	369.33
29	369.29	369.74	368.39	367.30	366.56	369.54	369.66	369.65	369.89	370.01	369.58	369.45
30	369.36	369.76	368.35	367.26	---	369.75	369.68	369.70	369.82	369.98	369.60	369.38
31	369.43	---	368.36	367.22	---	369.94	---	369.67	---	370.02	369.59	---
MEAN	369.36	369.27	368.68	367.64	366.80	367.47	370.42	369.74	369.95	369.82	369.78	369.54
MAX	369.63	369.76	369.77	368.30	367.18	369.94	371.42	369.91	370.31	370.02	370.07	369.98
MIN	369.13	369.04	368.03	367.22	366.56	366.49	369.66	369.61	369.68	369.67	369.56	369.21

CAL YR 1979 MEAN 369.50 MAX 371.87 MIN 367.67
WTR YR 1980 MEAN 369.04 MAX 371.42 MIN 366.49

04246500 ONEIDA RIVER AT CAUGHDENOY, NY

LOCATION.--Lat 43°14'49", long 76°10'12", Oswego County, Hydrologic Unit 04140202, on left bank at point of diversion to New York State Erie (Barge) Canal, 1.6 mi (2.6 km) downstream from Oneida Lake, and 2.6 mi (4.2 km) upstream from navigation dam at Caughdenoy.

DRAINAGE AREA.--1,382 mi^2 (3,579 km^2); 1902-09, 1,439 mi^2 (3,727 km^2).

PERIOD OF RECORD.--September 1902 to December 1909 (published as "near Euclid"), January 1910 to December 1912, and October 1947 to current year in reports of Geological Survey. September 1902 to December 1909 and January 1910 to September 1925 in reports of State Engineer and Surveyor.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Base gage: Water-stage recorder. Datum of gage is 362.00 ft (110.338 m) Barge Canal datum. Prior to June 5, 1907, headwater readings, and June 5, 1907 to Dec. 31, 1909, nonrecording gage readings at former Oak Orchard State Dam 5.5 mi (8.8 km) downstream at different datum. Jan. 1, 1910 to Dec. 31, 1912, nonrecording gage at site 2.5 mi (4.0 km) downstream from present site at different datum. From Oct. 9, 1947 to Nov. 7, 1951, water-stage recorder at site 2.5 mi (4.0 km) downstream at present datum.

Auxiliary gage: Water-stage recorder at site 2.5 mi (4.0 km) downstream, 350 ft (107 m) upstream from navigation dam at present datum (base gage site 1947-51).

Supplementary gage: Water-stage recorder at site 2.6 mi (4.2 km) downstream, 180 ft (55 m) downstream from navigation dam at present datum.

REMARKS.--Records fair. Jan. 1, 1910 to Dec. 31, 1912: Flow over dam computed on basis of coefficient determined for model of dam of same general type; flow through gate and diversion through lock culverts estimated by theoretical calculations.

1947 to current year: Record represents total discharge at Caughdenoy, including flow in Oneida and Erie (Barge) Canals. Considerable seasonal regulation by operation of gates in Oneida and Erie (Barge) Canals with a large amount of natural storage in Oneida Lake. Occasional large diurnal fluctuations caused by seiche in Oneida Lake. Water may be diverted into or received from Mohawk River basin through summit level of Erie (Barge) Canal between New London and Utica. Nearly all of flow from 14 mi^2 (36 km^2) of Tioughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin.

COOPERATION.--Records of gate openings, lockages, and elevations of water surface in Erie (Barge) Canal above and below lock 23, furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--43 years (1902-12, 1947-80), 2,571 ft^3/s (72.81 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 13,800 ft^3/s (391 m^3/s) Mar. 25-27, 1903; minimum daily, 52 ft^3/s (1.47 m^3/s) Oct. 24, 1910.

1947 to current year: Maximum daily discharge, 10,100 ft^3/s (286 m^3/s) June 25, 1972; minimum daily, 62 ft^3/s (1.76 m^3/s) July 29, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 8,000 ft^3/s (227 m^3/s) Apr. 14; minimum daily, 167 ft^3/s (4.73 m^3/s) Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	477	2170	5240	3210	1940	1210	5670	3590	391	1010	784	209
2	171	1610	5010	3110	1900	1190	5740	2450	415	1010	816	293
3	195	755	4890	3010	1880	1190	5770	2550	412	986	795	554
4	212	761	4610	2940	1830	1210	5810	2510	414	989	867	1740
5	236	1300	4660	2810	1780	1230	5640	2510	712	976	1080	2240
6	275	2170	4550	2730	1750	1230	6050	2290	1070	973	1070	2200
7	167	2100	4500	2650	1690	1240	6190	2290	1090	872	1070	2180
8	225	2440	3870	2520	1660	1260	6140	1460	1070	695	1070	2160
9	479	3110	4160	2650	1630	1280	6310	1030	2160	702	1070	2150
10	845	3110	4180	2610	1590	1320	6840	1050	4500	743	1070	1700
11	1950	3110	3950	2560	1580	1280	7430	1060	5440	754	1070	943
12	2630	3200	3770	2250	1540	1330	7600	1060	5340	746	1070	864
13	2620	3250	3760	2490	1530	1410	7470	1070	3340	739	1050	718
14	2590	2960	3660	2470	1500	1400	8000	1070	1470	724	1050	670
15	2580	2530	3680	2490	1470	1400	7460	1090	966	589	1040	704
16	2590	2240	3520	2550	1480	1470	7270	1080	1650	301	1080	716
17	2500	1840	3260	2550	1510	1480	7230	1090	2780	316	1100	717
18	2500	1840	3310	2500	1500	1480	7050	1080	2730	316	1050	708
19	2490	1850	3460	2410	1440	1720	6870	1750	1640	320	1030	718
20	2480	1840	3240	2360	1400	1900	6620	2920	939	321	732	730
21	2480	1840	3080	2360	1370	2510	6340	2920	961	354	234	730
22	1770	1840	2940	2430	1410	2700	6110	2930	980	332	223	723
23	708	1840	2860	2300	1350	3340	5870	1990	927	507	234	721
24	707	1840	2840	2270	1350	3820	5680	1230	794	777	223	565
25	696	1850	3030	2290	1270	4210	5470	1090	733	779	218	238
26	707	1920	3170	2240	1220	4520	5300	1050	798	780	218	224
27	708	2920	3310	2200	1220	4700	5220	972	969	769	213	225
28	718	4700	3300	2160	1210	4860	5300	845	977	737	212	236
29	708	5180	3310	2100	1200	5030	5040	693	974	761	219	222
30	1210	5210	3270	2060	---	5370	5080	398	1010	776	222	229
31	2110	---	3290	2010	---	5590	---	404	---	775	216	---
TOTAL	40734	73326	115680	77290	44200	73880	188570	49522	47652	21429	22396	27027
MEAN	1314	2444	3732	2493	1524	2383	6286	1597	1588	691	722	901
MAX	2630	5210	5240	3210	1940	5590	8000	3590	5440	1010	1100	2240
MIN	167	755	2840	2010	1200	1190	5040	398	391	301	212	209

CAL YR 1979 TOTAL 1058880 MEAN 2901 MAX 8870 MIN 167 CFSM 2.10 IN 28.50
WTR YR 1980 TOTAL 781706 MEAN 2136 MAX 8000 MIN 167 CFSM 1.55 IN 21.04

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY
(National stream-quality accounting network station)

LOCATION.--Lat 43°27'06", long 76°30'20", Oswego County, Hydrologic Unit 04140203, on right bank at lock 7 in Oswego, 0.8 mi (1.3 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--5,100 mi^2 (13,209 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1900 to April 1906, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1307. Prior to January 1904, published as "above Minetto" or "near Minetto." January 1904 to April 1906, published as "at Battle Island." Records for April 1897 to September 1900, published in WSP 65 and for October 1927 to September 1928, published in WSP 644, have been found to be unreliable and should not be used.

REVISED RECORDS.--WDR NY 78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.00 ft (74.981 m) Barge Canal datum. Prior to 1933, nonrecording gage at site about 6 mi (10 km) upstream at different datum.

REMARKS.--Records good. Prior to 1933 and subsequent to 1972, flow in Oswego (Barge) Canal not included. A large amount of natural storage and some artificial regulation is afforded by the many large lakes and the Erie (Barge) and Oswego (Barge) Canal systems in the river basin. Large diurnal fluctuations at low and medium flow caused by powerplants upstream from station. Oswego River basin receives water from Erie (Barge) Canal through lock 32 near Pittsford. Water may be diverted into or received from Mohawk River basin through summit levels of Erie (Barge) Canal between New London and Utica. During part of year entire flow from 45.5 mi^2 (118 km^2) of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin. Nearly all of flow from 14 mi^2 (36.3 km^2) of the Tioughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin.

COOPERATION.--Records of lockages at lock 7 furnished by New York State Department of Transportation, record of elevations of Lake Ontario by Corps of Engineers, daily discharge records for High Dam by Niagara Mohawk Power Corp.

AVERAGE DISCHARGE.--47 years (1933-1980), 6,731 ft^3/s (190.6 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,500 ft^3/s (1,060 m^3/s) Mar. 28, 1936, includes daily mean discharge of canals; maximum gage height, 13.46 ft (4.103 m) Apr. 10, 1940; minimum discharge (river only), 30 ft^3/s (0.85 m^3/s) Nov. 6, 1944; minimum daily 274 ft^3/s (7.76 m^3/s) Oct. 10, 1969; minimum gage height 0.97 ft (0.296 m) Aug. 24, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 19,900 ft^3/s (564 m^3/s) Mar. 23; maximum gage height, 9.51 ft (2.899 m) Mar. 22; minimum daily discharge, 1,190 ft^3/s (33.7 m^3/s) Sept. 29; minimum gage height, 2.00 ft (0.610 m) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2560	5630	14800	11800	3870	3110	15900	12200	1730	2730	1860	1370
2	1930	5950	14200	10300	3460	2820	16400	9990	2260	3120	1850	1960
3	1460	4960	13400	9290	3490	2840	16800	10400	2160	3940	3130	2790
4	1860	4040	13100	9920	3430	2770	17200	10000	2410	3410	2580	3400
5	2380	3280	12700	9870	3290	1910	17300	9840	2720	3570	2530	3120
6	5100	5240	12400	9600	3120	2830	17300	9200	3250	3530	2480	3220
7	4100	6110	12600	9130	3200	2780	17000	9060	3170	3620	2240	3140
8	3290	5730	12100	9030	3130	2720	16500	7470	4580	3600	2560	3140
9	4170	7090	12000	8980	3090	2880	17400	4340	6520	2850	2440	3030
10	5960	8320	11300	8800	2950	3350	19100	3130	8850	2630	2540	2960
11	6950	8220	11100	7870	3000	3470	19200	3830	11600	3080	2460	1520
12	8340	8240	11100	7970	2930	4410	19100	3710	11300	3330	2420	1520
13	8720	8390	10800	7940	2520	5440	19400	2430	7820	3070	2380	1710
14	8370	8400	10500	8000	2580	5160	19300	3520	3650	2810	2500	1840
15	8150	7890	10500	8240	2050	4870	19600	4910	3250	2860	1410	1810
16	7950	6850	10400	8010	2170	4600	19400	4810	3060	1370	1760	1890
17	6760	6280	9660	6960	2320	3100	19100	4680	6000	1260	2520	1950
18	5980	6210	9130	5560	2720	4960	18600	4170	6240	1270	2950	1880
19	6020	6050	9450	5180	3210	8540	18000	3100	5320	1450	2580	1870
20	5920	5940	9060	5160	3380	10200	17000	3790	3400	1460	1630	1850
21	5860	6040	7910	5020	2460	13200	15900	5430	3650	1600	1510	1930
22	5090	5980	7830	4360	2640	19800	14800	6420	3380	1800	1440	1780
23	3980	5990	7620	3250	2690	19900	13300	5640	3850	1510	1360	1880
24	4340	5950	7720	3850	3000	19300	10300	3820	2980	1410	1350	1730
25	3470	5880	9850	4050	2950	19200	7880	4030	2520	2160	1400	1480
26	3790	8230	12200	3940	2750	18200	7470	2570	2240	1860	1410	1350
27	4140	13600	13500	3950	3260	17100	8260	2190	2440	2580	1370	1330
28	3950	15700	13600	3880	3050	16200	8670	3180	2560	1890	1410	1260
29	3820	15800	13400	3800	3200	15800	10700	2990	2600	1440	1380	1190
30	4100	15400	13000	3780	---	16200	12000	2130	2750	2000	1340	1350
31	4000	---	12100	3830	---	16200	---	1710	---	1810	1440	---
TOTAL	152510	227390	349030	211320	85910	273860	468880	164690	128260	75020	62230	61250
MEAN	4920	7580	11260	6817	2962	8834	15630	5313	4275	2420	2007	2042
MAX	8720	15800	14800	11800	3870	19900	19600	12200	11600	3940	3130	3400
MIN	1460	3280	7620	3250	2050	1910	7470	1710	1730	1260	1340	1190

CAL YR 1979 TOTAL 3124350 MEAN 8560 MAX 29700 MIN 1020
WTR YR 1980 TOTAL 2260350 MEAN 6176 MAX 19900 MIN 1190

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1964-66, 1971 to current year.
CHEMICAL DATA: 1957 (a), 1958-60 (a) unpublished, 1964 (b), 1965 (c), 1966 (a), 1971-72 (a), 1974 (a), 1975 (c), 1976-80 (d).
MINOR ELEMENT DATA: 1971-1973 (a), 1975 (b), 1976 (a), 1977-80 (b).
ORGANIC DATA: OC--1975 (b), 1978-80 (d).
NUTRIENT DATA: 1971 (a), 1974 (a), 1975 (c), 1976-80 (d).
BIOLOGICAL DATA:
Bacteria--1974 (a), 1975 (c), 1976-80 (d).
Phytoplankton--1974 (a), 1975 (c), 1976 (d), 1977-78 (c), 1979-80 (b).
Periphyton--1975-79 (a).
SEDIMENT DATA: 1974 (a), 1975 (c), 1976 (d), 1977 (b), 1978-80 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1975 to current year.
WATER TEMPERATURES: July 1975 to current year.

INSTRUMENTATION.--Water quality monitor since July 1975.

REMARKS.--Interruptions in the record were due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1975-78): Maximum recorded, 2,090 micromhos Sept. 24, 1978; minimum recorded, 430 micromhos Apr. 19, 1976.
WATER TEMPERATURES (water years 1975-78): Minimum, freezing point on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 to SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (FT^3/S)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT 17...	1100	7500	960	7.4	10.5	6.0	10.1	93	280	K30	250
NOV 14...	1100	7950	830	7.4	7.5	5.0	10.6	88	320	66	230
DEC 11...	1000	11300	850	7.3	6.5	5.0	11.6	94	K180	140	240
JAN 28...	1000	4800	1060	7.5	.0	.50	12.3	88	110	74	300
FEB 26...	1000	4700	1460	7.6	.0	1.0	13.2	92	200	42	380
MAR 25...	1000	19200	800	7.4	3.5	.50	11.2	84	620	870	220
MAY 06...	1000	8400	900	7.0	15.0	5.0	9.2	94	--	K6	250
JUN 05...	1100	3900	1200	7.3	20.0	.30	8.7	96	120	100	310
JUL 08...	1400	3900	1020	7.8	23.0	3.5	7.0	80	370	92	290
AUG 28...	1345	3300	1320	7.7	25.0	.40	8.5	102	K180	K5	360
SEP 24...	1130	3120	1360	7.7	20.5	1.0	6.8	73	310	K60	380

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT 17...	150	81	12	70	2.5	98	63	160	.2	1.7	512
NOV 14...	110	73	11	63	2.4	120	58	130	.1	1.6	484
DEC 11...	130	77	11	55	2.6	110	56	130	.1	2.2	487
JAN 28...	190	99	12	79	2.4	110	61	180	.1	2.6	621
FEB 26...	270	130	13	120	3.3	110	77	320	.2	2.9	873
MAR 25...	130	72	10	51	2.4	96	45	140	.2	3.1	450
MAY 06...	130	77	13	68	2.4	120	58	160	.2	.8	508
JUN 05...	200	100	14	110	2.8	110	72	250	.2	.2	668
JUL 08...	180	95	13	89	3.0	110	80	230	.2	1.3	726
AUG 28...	270	120	14	110	3.2	86	73	290	.2	.6	800
SEP 24...	300	130	14	120	3.5	86	86	320	.2	.1	727

K Results based on colony count outside the acceptable range (non-ideal colony count).

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 to SEPTEMBER 1980

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)
OCT 17...	451	.39	.39	.15	.15	1.2	.62	1.3	.77	1.7	1.2
NOV 14...	413	.46	.30	.14	.10	.55	.58	.69	.68	1.2	.98
DEC 11...	403	.72	.72	.07	.04	.46	.49	.53	.53	1.3	1.3
JAN 28...	504	.47	.47	.31	.32	.44	.32	.75	.64	1.2	1.1
FEB 26...	737	.93	.93	.44	.48	.66	.29	1.1	.77	2.0	1.7
MAR 25...	386	.97	.96	.30	.27	.54	.31	.84	.58	1.8	1.5
MAY 06...	454	.59	.59	.09	.07	.76	.48	.85	.55	1.4	1.1
JUN 05...	617	.40	.38	.20	--	.66	--	.86	.53	1.3	.91
JUL 08...	580	.49	.49	.17	.05	.79	.53	.96	.58	1.5	1.1
AUG 28...	663	.09	.11	.18	.08	.23	.33	.41	.41	.50	.52
SEP 24...	727	--	.30	.09	.03	.83	.52	.92	.55	--	.85

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
OCT 17...	.08	.05	--	--	--	--	--	--	--	--	--
NOV 14...	.08	.05	--	--	--	--	--	--	--	--	--
DEC 11...	.07	.05	--	--	--	--	--	--	--	--	--
JAN 28...	.09	.08	--	--	--	--	--	--	--	--	--
FEB 26...	.14	.10	1	0	<50	60	0	9	20	10	0
MAR 25...	.11	.07	--	--	--	--	--	--	--	--	--
MAY 06...	.07	.01	--	--	--	--	--	--	--	--	--
JUN 05...	.07	--	1	1	100	60	1	1	<10	<10	0
JUL 08...	.08	.03	--	--	--	--	--	--	--	--	--
AUG 28...	.09	.01	--	--	--	--	--	--	--	--	--
SEP 24...	.08	.02	1	1	100	--	0	0	40	10	0

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 to SEPTEMBER 1980

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT											
17...	--	--	--	--	--	--	--	--	--	mZ	--
NOV											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
11...	--	--	--	--	--	--	--	--	--	--	--
JAN											
28...	--	--	--	--	--	--	--	--	--	--	--
FEB											
26...	0	3	2	210	10	6	5	40	40	.2	.2
MAR											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
06...	--	--	--	--	--	--	--	--	--	--	--
JUN											
05...	0	5	2	240	10	17	1	60	20	.2	<.1
JUL											
08...	--	--	--	--	--	--	--	--	--	--	--
AUG											
28...	--	--	--	--	--	--	--	--	--	--	--
SEP											
24...	0	4	2	350	40	1	0	70	--	<.1	<.1

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT											
17...	--	--	--	--	--	--	--	--	5.6	--	--
NOV											
14...	--	--	--	--	0	--	--	--	4.8	--	--
DEC											
11...	--	--	--	--	--	--	--	--	4.4	--	--
JAN											
28...	--	--	--	--	0	--	--	--	6.5	--	--
FEB											
26...	5	3	0	0	0	0	20	20	--	8.8	1.4
MAR											
25...	--	--	--	--	--	--	--	--	4.8	--	--
MAY											
06...	--	--	--	--	0	--	--	--	5.7	--	--
JUN											
05...	3	0	0	0	0	0	20	2	--	14	2.4
JUL											
08...	--	--	--	--	1	--	--	--	6.7	--	--
AUG											
28...	--	--	--	--	--	--	--	--	7.4	--	--
SEP											
24...	5	2	0	0	0	0	20	--	--	--	2.1

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)
NOV					
14...	1015	40	2.0	830	7.5
14...	1030	140	2.0	840	7.5
14...	1045	240	2.0	845	7.5
MAR					
25...	1005	40	1.0	800	3.5
25...	1010	40	4.0	810	3.5

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)
MAR					
25...	1100	140	1.0	815	3.0
25...	1105	140	4.0	810	3.5
25...	1130	240	1.0	825	3.5
25...	1135	240	4.0	810	3.5

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT³/S)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT³/S)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 17...	1100	7500	452	9150	MAR 25...	1000	19200	23	1190
NOV 14...	1100	7950	11	236	MAY 06...	1000	8400	15	340
DEC 11...	1000	11300	7	214	JUN 05...	1100	3900	7	74
JAN 28...	1000	4800	4	52	JUL 08...	1400	3900	9	95
FEB 26...	1000	4700	7	89	SEP 24...	1130	3120	25	211

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, PERIOD JULY 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	JUL 10,79	AUG 14,79	SEP 18,79	NOV 14,79	MAR 25,80
TIME	1100	1000	1100	1400	1000
TOTAL CELLS/ML	33000	3800	23000	9400	9600
DIVERSITY: DIVISION	1.5	1.3	1.6	1.6	0.7
.CLASS	1.5	1.3	1.6	1.6	0.7
..ORDER	0.0	1.7	1.8	2.3	1.0
...FAMILY	0.0	1.9	2.3	2.6	1.1
....GENUS	0.0	2.2	3.0	3.0	1.1

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHLOROCOCCACEAE										
....CHLOROCOCCUM	1900	6	--	-	--	-	--	-	--	-
...COELASTRACEAE										
....COELASTRUM	--	-	--	-	850	4	--	-	--	-
...HYDRODICTYACEAE										
....PEDIASTRUM	2000	6	--	-	--	-	--	-	--	-
...MICRACTINIACEAE										
....MICRACTINIUM	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	250	1	65	2	270	1	87	1	62	1
....CHLORELLA	--	-	--	-	--	-	--	-	*	0
....CHODATELLA	--	-	--	-	420	2	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	100	3	480	2	87	1	--	-
....OOCYSTIS	--	-	*	0	1600	7	490	5	--	-
....POLYEDRIOPSIS	--	-	--	-	*	0	--	-	--	-
....SELENASTRUM	--	-	65	2	--	-	--	-	--	-
....TETRAEDRON	*	0	--	-	*	0	--	-	*	0
....WESTELLA	--	-	--	-	850	4	--	-	--	-
...SCENEDESMACEAE										
....CRUCIGENIA	--	-	--	-	850	4	--	-	--	-
....SCENEDESMUS	4400	14	550	15	3100	13	1300	14	*	0
....TETRASTRUM	--	-	--	-	--	-	120	1	--	-
..TETRASPORALES										
...COCCOMYXACEAE										
....ELAKATOTHRIX	*	0	--	-	--	-	--	-	*	0
...PALMELLACEAE										
....SPHAEROCYSTIS	--	-	--	-	--	-	990	10	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CARTERIA	--	-	--	-	*	0	--	-	--	-
....CHLAMYDOMONAS	2500	8	26	1	210	1	*	0	660	7
....CHLOROGONIUM	--	-	--	-	--	-	--	-	--	-
...VOLVOCACEAE										
....PANDORINA	--	-	--	-	--	-	--	-	--	-
..ZYGNEMATALES										
...DESMIDIACEAE										
....CLOSTERIUM	--	-	--	-	--	-	--	-	--	-

NOTE: * - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, PERIOD JULY 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	JUL 10,79		AUG 14,79		SEP 18,79		NOV 14,79		MAR 25,80	
TIME	1100		1000		1100		1400		1000	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE	--	-	--	-	--	-	--	-	--	-
....COSCINODISCUS	--	-	--	-	*	0	--	-	--	-
....CYCLOTELLA	2600	8	290	8	320	1	1600#	17	160	2
....MELOSIRA	--	-	140	4	4000#	18	1100	12	--	-
....STEPHANODISCUS	--	-	91	2	420	2	58	1	--	-
..PENNALES										
...ACHNANTHACEAE										
....COCCONEIS	--	-	--	-	--	-	*	0	--	-
....RHOICOSPHENIA	320	1	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....AMPHORA	--	-	--	-	--	-	--	-	*	0
...DIATOMACEAE										
....DIATOMA	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	--	-	87	1	*	0
....FRAGILARIA	--	-	--	-	160	1	--	-	--	-
....SYNEDRA	250	1	--	-	--	-	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	--	-	--	-	*	0
...NAVICULACEAE										
....NAVICULA	--	-	--	-	--		*	0	*	0
...NITZSCHIACEAE										
....NITZSCHIA	--	-	26	1	270	1	*	0	120	1
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	--	-	--	-	--	-	--	-	*	0
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE	630	2	--	-	--	-	--	-	--	-
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	--	-	--	-
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	*	0	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	310	8	8800#	38	1200	13	230	2
....COCCOCHLORIS	--	-	--	-	--	-	--	-	*	0
....GOMPHOSPHAERIA	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	4100	12	--	-	--	-	--	-	--	-
....APHANIZOMENON	--	-	--	-	--	-	2200#	23	--	-
...OSCILLATORIACEAE										
....LYNGBYA	--	-	--	-	--	-	--	-	--	-
....OSCILLATORIA	8200#	25	2100#	55	--	-	--	-	8000#	84
....SCHIZOTHRIX	3200	10	--	-	--	-	--	-	--	-
...RIVULARIACEAE										
....RAPHIDIOPSIS	2200	7	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	*	0	--	-	*	0
PYRRHOPHYTA (FIRE ALGAE)										
.DINOPHYCEAE										
..PERIDINIALES										
...GLENODINIACEAE										
....GLENODINIUM	*	0	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, PERIOD JULY 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	MAY 6,80	JUN 5,80	JUL 8,80	AUG 28,80	SEP 24,80
TIME	1000	1100	1400	1345	1130
TOTAL CELLS/ML	15000	39000	30000	140000	210000
DIVERSITY: DIVISION	1.8	1.4	1.5	0.8	0.7
.CLASS	1.8	1.4	1.5	0.8	0.7
..ORDER	2.4	2.1	1.9	1.6	1.6
...FAMILY	2.8	2.5	2.1	1.9	1.9
....GENUS	3.1	0.0	2.6	2.0	2.2

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHLOROCOCCACEAE										
....CHLOROCOCCUM	--	-	--	-	--	-	--	-	--	-
...COELASTRACEAE										
....COELASTRUM	--	-	560	1	--	-	--	-	3500	2
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	--	-	3200	2	--	-
...MICRACTINIACEAE										
....MICRACTINIUM	--	-	--	-	--	-	6400	5	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	650	4	560	1	--	-	*	0	*	0
....CHLORELLA	--	-	--	-	--	-	--	-	--	-
....CHODATELLA	93	1	560	1	--	-	--	-	--	-
....DICTYOSPHAERIUM	560	4	--	-	--	-	--	-	1200	1
....KIRCHNERIELLA	--	-	1300	3	490	2	--	-	--	-
....OOCYSTIS	--	-	1100	3	*	0	1000	1	3500	2
....POLYEDRIOPSIS	--	-	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	*	0	*	0
....TETRAEDRON	--	-	*	0	--	-	*	0	*	0
....WESTELLA	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....CRUCIGENIA	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	2200	15	8900#	23	1500	5	5600	4	5900	3
....TETRASTRUM	--	-	560	1	--	-	--	-	--	-
..TETRASPORALES										
...COCCOMYXACEAE										
....ELAKATOTHRIX	--	-	--	-	--	-	--	-	--	-
...PALMELLACEAE										
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-	1400	1
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CARTERIA	--	-	--	-	--	-	--	-	--	-
....CHLAMYDOMONAS	280	2	5400	14	1200	4	*	0	1200	1
....CHLOROGONIUM	--	-	--	-	--	-	--	-	*	0
...VOLVOCACEAE										
....PANDORINA	--	-	--	-	2000	7	--	-	--	-
..ZYGNEMATALES										
...DESMIDIACEAE										
....CLOSTERIUM	--	-	*	0	--	-	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE	--	-	*	0	--	-	--	-	--	-
....COSCINODISCUS	--	-	--	-	--	-	--	-	--	-
....CYCLOTELLA	5400#	36	1500	4	9400#	32	1900	1	3700	2
....MELOSIRA	650	4	1300	3	5500#	19	3500	3	5900	3
....STEPHANODISCUS	--	-	--	-	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....COCCONEIS	93	1	--	-	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....AMPHORA	--	-	--	-	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	280	2	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	370	2	*	0	--	-	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	93	1	*	0	--	-	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	190	1	560	1	--	-	*	0	*	0

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, PERIOD JULY 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	MAY 6,80		JUN 5,80		JUL 8,80		AUG 28,80		SEP 24,80	
TIME	1000		1100		1400		1345		1130	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	--	-	--	-	--	-	--	-	*	0
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE	--	-	--	-	--	-	--	-	--	-
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	840	6	--	-	*	0	*	0	--	-
...CRYPTOMONADACEAE										
....CRYPTOMONAS	93	1	*	0	240	1	*	0	*	0
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	4200	2
....ANACYSTIS	1100	7	1400	4	1800	6	44000#	32	120000#	56
....COCCOCHLORIS	--	-	--	-	--	-	--	-	--	-
....GOMPHOSPHAERIA	--	-	--	-	--	-	--	-	*	0
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	700	1	2600	1
....APHANIZOMENON	--	-	--	-	--	-	--	-	8700	4
...OSCILLATORIACEAE										
....LYNGBYA	1700	11	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	14000#	37	7300#	25	68000#	50	47000#	22
....SCHIZOTHRIX	--	-	--	-	--	-	--	-	--	-
...RIVULARIACEAE										
....RAPHIDIOPSIS	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	280	2	--	-	--	-	--	-	--	-
....TRACHELOMONAS	93	1	*	0	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)										
.DINOPHYCEAE										
..PERIDINIALES										
...GLENODINIACEAE										
....GLENODINIUM	--	-	*	0	--	-	*	0	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1										1030	853	1000
2										1020	1010	1010
3										1040	974	1020
4										958	737	788
5										841	781	818
6										846	825	831
7										925	831	883
8										925	894	913
9										930	871	889
10										943	927	937
11										955	937	945
12							760	711	735	958	925	949
13							815	760	795	925	727	804
14							888	815	863	930	757	846
15							883	857	870	992	863	941
16							888	858	874	950	854	896
17							858	790	811	1180	950	1090
18							865	790	817	1180	861	1120
19							865	751	786	1090	984	1040
20							820	774	806	986	918	950
21							840	818	829	1030	919	951
22							861	840	853			
23							905	852	874			
24							938	905	926			
25							938	840	900			
26							843	742	793			
27							901	746	796			
28							925	882	902			
29							922	832	875			
30							854	832	837			
31							940	854	900			
MONTH							940	711	842	1180	727	934

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							793	704	748	820	696	759
2							706	682	697	850	706	771
3							682	651	666	866	778	800
4							688	665	678	845	778	816
5							762	753	759	909	841	885
6							941	768	870	905	880	889
7							900	784	819	986	868	925
8							786	759	777	950	902	925
9							759	716	749			
10							716	654	681			
11							799	705	762	1240	973	1140
12							801	763	784			
13				1360	1100	1200	763	671	713			
14				1350	1170	1250	830	702	776	950	791	857
15				1240	1170	1220	819	728	761	947	798	876
16				1220	1130	1170	780	732	765			
17							813	746	781	1350	1090	1200
18							790	767	776			
19				1410	1160	1240	792	767	777			
20				1700	1260	1560	802	784	796			
21				1240	1020	1120	819	779	791	1200	886	1120
22				1040	539	781	851	794	831	902	776	819
23				871	545	782	976	855	923	992	804	860
24				868	838	853	1190	966	1010	1010	925	984
25				838	743	799	1220	993	1140	1030	958	1010
26				868	733	780	993	743	897			
27				887	815	849	746	710	724			
28				818	781	791	734	722	727			
29				787	707	755	728	693	696			
30				746	700	718	812	706	771			
31				827	748	792	---	---	---			
MONTH				1700	539	980	1220	651	788	1350	696	920

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1												
2												
3												
4												
5												
6												
7												
8												
9				1200	1160	1170						
10				1190	1150	1170						
11				1250	1150	1190						
12				1310	1250	1280						
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH				1310	1150	1200						

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1										4.0	3.5	4.0
2										4.0	3.5	4.0
3										3.5	3.0	3.5
4										3.0	3.0	3.0
5										3.0	3.0	3.0
6										2.5	2.0	2.5
7										3.0	2.0	2.5
8										2.0	2.0	2.0
9										2.5	2.0	2.0
10										2.5	2.0	2.0
11										3.0	2.0	2.5
12							7.0	6.5	7.0	2.5	2.0	2.5
13							7.0	6.0	6.5	2.5	2.0	2.0
14							6.5	6.5	6.5	2.5	2.0	2.5
15							6.5	6.0	6.5	3.0	2.5	2.5
16							6.0	4.5	5.5	2.5	2.5	2.5
17							5.5	3.5	4.5	3.0	2.5	2.5
18							4.0	3.5	3.5	3.0	3.0	3.0
19							3.5	2.5	3.0	3.0	3.0	3.0
20							3.0	2.5	2.5	3.0	2.5	2.5
21							3.0	2.0	2.5	2.5	2.0	2.0
22							3.0	2.5	3.0	2.0	1.0	2.0
23							3.5	3.0	3.5			
24							4.0	3.5	4.0			
25							4.5	4.0	4.5			
26							4.5	4.5	4.5			
27							4.5	4.0	4.0			
28							4.0	4.0	4.0			
29							4.5	4.0	4.0			
30							4.5	4.5	4.5			
31							4.5	4.0	4.0			
MONTH							7.0	2.0	4.5	4.0	1.0	2.5

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							6.5	5.0	6.0	13.0	11.5	12.0
2							6.5	6.0	6.5	13.5	13.0	13.0
3							7.0	6.5	6.5	14.5	13.5	14.0
4							7.0	6.5	7.0	14.5	14.0	14.5
5							7.0	6.5	7.0	15.5	14.5	15.0
6							7.0	6.5	7.0	15.5	15.0	15.0
7							8.5	7.0	7.5	15.5	14.0	15.0
8							9.5	8.0	8.5	15.5	14.0	15.0
9							9.5	9.0	9.5			
10							10.0	9.5	9.5			
11							10.0	9.5	9.5	15.0	14.0	14.0
12							9.5	9.0	9.0			
13				1.5	1.5	1.5	9.5	8.5	9.0			
14				1.5	1.0	1.5	9.0	8.5	9.0	16.0	13.5	14.5
15				2.0	1.0	1.5	8.5	8.5	8.5	15.0	14.0	14.5
16				2.5	1.0	1.5	8.5	8.0	8.0			
17							8.0	7.5	7.5	16.5	14.5	15.0
18							8.5	7.5	8.0			
19				3.5	2.5	3.0	9.5	8.0	8.5			
20				4.0	3.5	3.5	10.0	9.5	9.5			
21				4.5	4.0	4.0	10.0	9.5	10.0	17.5	16.5	17.0
22				4.0	3.0	3.5	10.5	10.0	10.0	18.0	16.5	17.0
23				3.0	3.0	3.0	11.0	10.0	10.5	18.5	17.0	17.5
24				3.5	3.0	3.5	11.0	10.5	10.5	19.0	17.0	18.0
25				3.5	3.5	3.5	10.5	10.0	10.5	19.5	18.5	19.0
26				4.0	3.5	3.5	11.0	10.0	10.5			
27				5.0	3.5	4.0	11.0	10.5	10.5			
28				5.5	4.5	5.0	11.0	11.0	11.0			
29				5.5	5.0	5.5	11.0	10.5	11.0			
30				6.5	5.5	6.0	12.0	11.0	11.5			
31				6.0	6.0	6.0	---	---	---			
MONTH				6.5	1.0	3.5	12.0	5.0	9.0	19.5	11.5	15.5

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1												
2												
3												
4												
5												
6												
7												
8												
9				23.5	21.5	22.0						
10				23.5	20.5	22.0						
11				24.0	22.0	22.5						
12				24.0	21.5	22.5						
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH				24.0	20.5	22.5						
YEAR	24.0	1.0	7.5									

LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO LAKE ONTARIO

04221990 RUSHFORD LAKE AT CANEADEA DAM, NY.--Lat 42°22'49", long 78°11'00", Allegany County, Hydrologic Unit 04130002, at Caneadea Dam, 2.4 mi (3.9 km) upstream from Caneadea Creek mouth.

Lake is formed by Caneadea Dam completed in 1928 with capacity of 1,104,000 ft³ (31,625 m³) and is used for power generation (see station 04221991 for monthly mean discharges).

04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

04227980 CONESUS LAKE NEAR LAKEVILLE, NY (see station for daily mean elevation).

04228845 HONEOYE LAKE NEAR HONEOYE, NY (see station for daily mean elevation).

04228950 CANADICE LAKE NEAR HEMLOCK, NY (see station 04229000 for observed and adjusted monthly mean discharges).

04232400 SENECA LAKE AT WATKINS GLEN, NY (see station for daily mean elevation).

04232450 KEUKA INLET (KEUKA LAKE) AT HAMMONDSPORT, NY (see station for daily mean elevation).

04233500 CAYUGA INLET (CAYUGA LAKE) AT ITHACA, NY (see station for daily mean elevation).

04234500 CANANDAIGUA LAKE AT CANANDAIGUA, NY (see station for daily mean elevation).

04235396 OWASCO LAKE NEAR AUBURN, NY (see station for daily elevation).

04236000 SKANEATELES LAKE AT SKEATELES, NY (see station for daily elevation).

04238500 ONONDAGA RESERVOIR NEAR NEDROW, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

04249010 LAKE ONTARIO AT OSWEGO, NY

LOCATION.--Lat 43°27'51", long 76°30'42" Oswego County, Hydrologic Unit 04150200, in southwest corner of Port of Oswego Authority building at mouth of Oswego River at Oswego.

DRAINAGE AREA.--295,800 mi² (766,100 km²).

PERIOD OF RECORD.--January 1860 to current year. Records prior to October 1960 in files of Lake Survey Center.

GAGE.--Water-stage recorder. Elevations are in feet International Great Lakes Datum (1955). Prior to Jan. 1, 1933, nonrecording gages.

COOPERATION.--Records furnished by U.S. Department of Commerce, NOAA-NOS, Lake Survey Center, Detroit, Mich.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 248.96 ft (75.883 m) June 6, 1952; minimum observed, 240.94 ft (73.438 m) Dec. 23, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 246.47 ft (75.124 m) July 8; minimum, 243.70 ft (74.280 m) Dec. 19.

ELEVATION (FEET IGLD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244.81	244.38	244.20	244.28	244.47	244.16	244.93	246.03	245.94	245.98	245.92	245.30
2	244.79	244.47	244.32	244.28	244.49	244.10	244.98	246.03	245.95	246.01	245.92	245.51
3	244.78	244.43	244.29	244.27	244.45	244.11	244.99	246.04	246.00	245.99	245.96	245.57
4	244.76	244.44	244.34	244.18	244.41	244.04	245.09	246.04	246.03	245.97	245.92	245.47
5	244.86	244.32	244.12	244.21	244.37	244.08	245.22	246.02	245.97	245.99	245.90	245.48
6	244.93	244.31	244.23	244.11	244.31	244.08	245.14	246.03	245.91	246.04	245.94	245.49
7	245.00	244.40	244.18	244.26	244.37	244.03	245.08	246.05	245.97	245.96	245.90	245.46
8	244.94	244.31	244.52	244.29	244.37	244.04	245.07	246.04	246.11	245.95	245.91	245.38
9	244.93	244.25	244.31	244.20	244.35	244.09	245.23	246.06	246.01	245.95	246.00	245.35
10	244.82	244.35	244.16	244.04	244.35	244.02	245.34	245.99	246.02	245.92	245.91	245.40
11	244.79	244.34	244.17	244.02	244.31	244.37	245.37	245.96	246.01	245.95	245.83	245.40
12	244.76	244.32	244.26	244.58	244.40	244.14	245.42	246.00	245.98	245.94	245.93	245.27
13	244.91	244.28	244.20	244.10	244.34	243.92	245.52	246.02	245.96	245.92	245.89	245.19
14	244.87	244.32	244.25	244.15	244.36	244.23	245.44	246.03	245.95	245.87	245.82	245.22
15	244.82	244.24	244.09	244.23	244.27	244.26	245.60	246.03	245.99	245.83	245.91	245.13
16	244.73	244.31	244.15	244.17	244.31	244.00	245.76	245.99	245.99	245.88	245.91	245.00
17	244.73	244.29	244.33	244.15	244.36	243.98	245.70	245.95	245.95	245.91	245.78	245.06
18	244.72	244.15	244.13	244.26	244.28	244.28	245.72	245.97	245.94	245.88	245.65	245.02
19	244.60	244.14	244.00	244.40	244.17	244.09	245.72	246.04	245.91	245.84	245.68	244.98
20	244.66	244.14	244.00	244.42	244.18	244.08	245.76	246.04	246.05	245.80	245.62	244.92
21	244.65	244.12	243.94	244.41	244.19	244.18	245.81	246.03	246.03	245.93	245.48	244.94
22	244.62	244.07	243.97	244.28	244.12	244.50	245.79	246.02	245.98	245.94	245.47	244.97
23	244.66	244.06	244.02	244.50	244.22	244.51	245.82	246.01	245.97	246.01	245.50	245.07
24	244.77	244.08	244.01	244.46	244.24	244.50	245.83	246.02	245.97	245.99	245.48	244.92
25	244.79	244.10	244.24	244.36	244.19	244.67	245.84	246.03	245.94	245.97	245.43	244.83
26	244.74	244.13	244.33	244.43	244.21	244.70	245.84	246.04	245.95	245.95	245.43	245.13
27	244.59	244.24	244.37	244.36	244.23	244.71	245.83	246.05	246.00	245.91	245.46	244.92
28	244.58	244.31	244.43	244.47	244.26	244.73	245.86	245.99	245.96	245.84	245.45	244.86
29	244.61	244.36	244.42	244.45	244.27	244.80	245.96	245.93	245.97	245.94	245.42	244.74
30	244.50	244.27	244.38	244.46	---	244.87	246.00	245.90	246.01	245.97	245.38	244.73
31	244.38	---	244.28	244.42	---	244.84	---	245.94	---	245.92	245.35	---
MEAN	244.75	244.26	244.21	244.30	244.31	244.29	245.52	246.01	245.98	245.93	245.71	245.16
MAX	245.00	244.47	244.52	244.58	244.49	244.87	246.00	246.06	246.11	246.04	246.00	245.57
MIN	244.38	244.06	243.94	244.02	244.12	243.92	244.93	245.90	245.91	245.80	245.35	244.73

CAL YR 1979 MEAN 245.03 MAX 246.12 MIN 243.87
WTR YR 1980 MEAN 245.04 MAX 246.11 MIN 243.92

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream when continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1980

Station No.	Station name	Location	Drainage area (mi^2)	Miles above mouth	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Susquehanna River basin					
01503950	Chenango River at Morrisville	Lat 42°53'56", long 75°39'09", Madison County, Hydrologic Unit 02050102, at bridge on Reservoir Road, at Morrisville, 250 ft (76 m) downstream from reservoir outlet stream, and 1.6 mi (2.6 km) upstream from Electric Light Stream. Previously published as "Callahan Brook at Morrisville".		1.6	1972, 1978, 1980	11- 2-77 5-27-80	*11.0 *3.68
‡01503960	Electric Light Stream near Morrisville	Lat 42°52'51", long 75°38'37", Madison County, Hydrologic Unit 02050102, at bridge on town road between Eaton Road and Morrisville, in Eagleville, 0.4 mi (0.6 km) upstream from mouth, and 1.3 mi (2.1 km) south of Morrisville.	7.21	0.4	1975, 1977-78, 1980	4-12-78 5-27-80	91.3 *2.12
‡01503980	Chenango River at Eaton	Lat 42°51'02", long 75°36'21", Madison County, Hydrologic Unit 02050102, at bridge on London Road at Eaton, 0.1 mi (0.2 km) upstream from Eaton Brook, and 0.1 mi (0.2 km) downstream from State Highway 26.	24.3		1964-65, 1970-72, 1974, 1977-80	11- 2-77 3- 5-79 5-27-80	*32.0 841 *10.2
01504050	Chenango River at Randallsville	Lat 42°47'52", long 75°34'16", Madison County, Hydrologic Unit 02050102, at bridge on Hamilton Road at Randallsville, and 0.8 mi (1.3 km) upstream from Payne Brook.			1971, 1978, 1980	11- 2-77 5-27-80	*106 *23.4
01504310	Payne Brook at Hamilton	Lat 42°49'02", long 75°32'58", Madison County, Hydrologic Unit 02050102, at bridge upstream from sewage treatment plant in Hamilton, and 2.4 mi (3.9 km) upstream from mouth.	11.0	2.4	1969-71, 1978, 1980	11- 3-77 5-27-80	*56.1 *12.8
01504320	Payne Brook at Middleport	Lat 42°47'27", long 75°33'42", Madison County, Hydrologic Unit 02050102, at bridge on Middleport Road in Middleport, and 0.3 mi (0.5 km) upstream from mouth.		0.3	1971, 1980	5-27-80	*12.5
01510300	Brakel Creek at Lower Cincinnatus	Lat 42°31'49", long 75°53'58", Cortland County, Hydrologic Unit 02050102, at bridge on county highway at Lower Cincinnatus, and 0.2 mi (0.3 km) upstream from mouth.		0.2	1964, 1977, 1980	6- 6-80	*1.91

* Base flow.

‡ Also a crest-stage partial-record station.

Discharge measurements made at low-flow partial-record stations during water year 1980--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Miles above mouth	Period of record	Measurements	
						Date	Discharge (ft^3/s)
		Allegheny River basin					
03013770	Pendergast Creek near Chautauqua	Lat 42°11'19", long 79°27'10" Chautauqua County, Hydrologic Unit 05010002, at bridge on State Highway 397, at State Fish Hatchery, 0.7 mi (1.1 km) upstream from mouth, and 1.1mi (1.8 km) southeast of village limits of Chautauqua.	21.2	0.7	1952, 1967-68, 1978-80	5-28-80 9- 9-80	*10.5 *5.77
03013820	Bemus Creek at Bemus Point	Lat 42°09'14", long 79°22'57", Chautauqua County, Hydrologic Unit 05010002, at bridge on County Highway 126, at Bemus Point.	12.2	0.2	1952, 1967-68, 1978-80	5-28-80 9- 9-80	*3.20 *1.60
		Streams tributary to Lake Ontario					
04220262	Northrup Creek at North Greece	Lat 43°14'55", long 77°45'06", Monroe County, Hydrologic Unit 04130001, at bridge on Manitou Road, and 0.1 mi (0.2 km) west of North Greece.			1971, 1980	5-29-80 6-25-80	*10.1 *14.8
04232082	Wolcott Creek at West Butler	Lat 43°11'23", long 76°48'11", Wayne County, Hydrologic Unit 04140101, at bridge on Smith Road, 0.8 mi (1.3 km) northeast of West Butler, and 2.2 mi (3.5 km) south of Wolcott.	12.1		1955, 1963, 1971-72, 1977, 1980	5-29-80	*3.16
04232084	Wolcott Creek at Furnace Village	Lat 43°14'26", long 76°48'57", Wayne County, Hydrologic Unit 04140101, at bridge on Furnace Road, 0.3 mi (0.5 km) east of Furnace Village.			1963, 1968, 1977, 1980	5-29-80	*4.25
042320841	Wolcott Creek tributary No. 2 near Furnace Village	Lat 43°15'13", long 76°48'42", Wayne County, Hydrologic Unit 04140101, at bridge on East Port Bay Road, 0.3 mi (0.5 km) upstream from mouth, and 1.0 mi (1.6 km) northeast of Furnace Village.		0.3	1971, 1977, 1980	5-29-80 6-25-80	*0.56 *1.12
04235724	Cold Spring Brook at Weedsport	Lat 43°02'37", long 76°34'42", Cayuga County, Hydrologic Unit 04140201, at bridge on State Highway 31, 0.8 mi (1.3 km) west of Weedsport.		2.6	1977-80	7- 9-79 8-21-79 5-28-80 6-13-80 8-25-80	*5.25 *5.14 *8.17 *12.9 *4.22
04235727	Putnam Brook at Weedsport	Lat 43°03'21", long 76°33'12", Cayuga County, Hydrologic Unit 04140201, at bridge on State Highway 31, 0.8 mi (1.3 km) northeast of Weedsport.		1.1	1977-80	7- 9-79 8-21-79 5-28-80 6-13-80 8-25-80	*1.85 *1.70 *5.34 *7.29 *.60
04240253	Geddes Brook at Fairmount	Lat 43°03'26", long 76°14'03", Onondaga County, Hydrologic Unit 04140201, at downstream side of bridge on Horan Road at Fairmount and 0.2 mi (0.3 km) downstream from tracks of Penn Central Transportation Company.		1.4	1978-80	5-28-80 6-13-80 7-17-80 8-25-80	*7.58 *8.92 *5.07 *3.40

* Base flow.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1980

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		Susquehanna River basin					
01496370	Mink Creek at Richfield Springs, NY	Lat 42°50'55", long 75°00'10", Otsego County, Hydrologic Unit 02050101, at bridge on State Highway 28, 0.4 mi (0.6 km) southwest of Richfield Springs, and 1 mi (1.6 km) upstream from mouth.	10.4	1969-80	3-21-80	5.26	-
01497805	Little Elk Creek near Westford, NY	Lat 42°38'01", long 74°47'45", Otsego County, Hydrologic Unit 02050101, at culvert on Greenbush Road, 1.2 mi (1.9 km) south of Westford, and 2.2 mi (3.5 km) from mouth.	3.73	1978-80	3-21-80	17.21	134
01501140	Wharton Creek tributary near Edmeston, NY	Lat 42°42'35", long 75°13'19", Otsego County, Hydrologic Unit 02050101, at culvert on town road, 1.1 mi (1.8 km) upstream from mouth, and 1.4 mi (2.3 km) northeast of Edmeston.	2.02	1976-80	3-18-80 3-21-80	b4.05 2.99	- 98
01502701	Susquehanna River at Afton, NY	Lat 42°13'38", long 75°31'27", Chenango County, Hydrologic Unit 02050101, on right bank at downstream side of bridge on State Highway 41, 0.1 mi (0.2 km) southeast of Afton and intersection of State Highways 7 and 41, and 0.2 mi (0.32 km) downstream from Kelsey Brook.	1,716	1972,77, 1979-80	3-23-80	13.00	22,800
01502714	Oquaga Creek near Belden, NY	Lat 42°10'12", long 75°40'45", Broome County, Hydrologic Unit 02050101, at culvert on Kane Road, 2.3 mi (3.7 km) south of Belden, 2.8 mi (4.5 km) west of Harpursville, and 4.5 mi (7.2 km) upstream from mouth.	3.37	1977-80	3-21-80	2.32	171
01503960	Electric Light Stream near Morrisville, NY	Lat 42°52'51", long 75°38'37", Madison County, Hydrologic Unit 02050102, at bridge on Eaton-Morrisville Road, in Eagleville, 0.4 mi (0.6 km) upstream from mouth, and 1.3 mi (2.1 km) south of Morrisville.	7.21	1976-80	3-21-80	10.03	245
01503980	Chenango River at Eaton, NY	Lat 42°51'02", long 75°36'21", Madison County, Hydrologic Unit 02050102, at bridge on Landon Road at Eaton, 0.1 mi (0.2 km) upstream from Eaton Brook, and 0.1 mi (0.2 km) downstream from State Highway 26.	24.3	1964-65, 1967-80	3-21-80	7.49	1,080
01505017	Cold Brook near North Norwich, NY	Lat 42°36'30", long 75°32'16", Chenango County, Hydrologic Unit 02050102, at culvert on town road, 0.4 mi (0.6 km) west of railroad tracks, 0.8 mi (1.3 km) southwest of North Norwich, and 1.8 mi (2.9 km) upstream from mouth.	5.80	1980	3-21-80	22.45	225

b Ice jam.

Annual maximum discharge at crest-stage partial-record stations during water year 1980--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		Susquehanna River basin--Continued					
01507000	Chenango River at Greene, NY	Lat 42°19'28", long 75°46'18", Chenango County, Hydrologic Unit 02050102, on left bank 1,700 ft (520 m) downstream from bridge on State Highway 206 at Greene, and 0.6 mi (1.0 km) downstream from Birdsall Creek.	593	1937-70*, 1971-80	3-22-80	11.96	8,040
01508946	Otter Creek tributary at State Highway 222 near Cortland, NY	Lat 42°35'22", long 76°14'01", Cortland County, Hydrologic Unit 02050102, at culvert on State Highway 222, 1.0 mi (1.6 km) upstream from mouth, and 1.8 mi (2.9 km) west of Cortland.	2.85	1976-80	3-21-80	10.22	a30
01510610	Merrill Creek tributary near Texas Valley, NY	Lat 42°28'03", long 75°59'19", Cortland County, Hydrologic Unit 02050102, at bridge on town road, 0.3 mi (0.5 km) upstream from mouth, and 1.4 mi (2.3 km) southwest of Texas Valley.	5.32	1976-80	11-26-79	2.95	530
01511500	Tioughnioga River at Itaska, NY	Lat 42°17'55", long 75°54'30", Broome County, Hydrologic Unit 02050102, on right bank at Itaska, 3.8 mi (6.1 km) downstream from Otselic River and village of Whitney Point, and 6 mi (10 km) upstream from mouth.	730	1929-67*, 1968-80	3-22-80	7.59	9,490
01513500	Susquehanna River at Vestal, NY	Lat 42°05'27", long 76°03'23", Broome County, Hydrologic Unit 02050103, on left bank 400 ft (120 m) downstream from highway bridge at Vestal,and 800 ft (240 m) upstream from Choconut Creek.	3,491	1938-67*, 1968-72, 1974-80	3-22-80	18.26	44,000
01513712	Nanticoke Creek tributary at Nanticoke, NY	Lat 42°16'40", long 76°02'51", Broome County, Hydrologic Unit 02050103, at culvert on Rabbit Road, 0.4 mi (0.6 km) northeast of Nanticoke, and 0.6 mi (1.0 km) upstream from mouth.	1.70	1976-80	4- 9-80	5.31	300
01514000	Owego Creek near Owego, NY	Lat 42°07'40", long 76°16'17", Tioga County, Hydrologic Unit 02050103, on right bank of right channel 300 ft (91 m) upstream from bridge on State Highway 96, 0.5 mi (0.8 km) upstream from Catatonk Creek, and 1.5 mi (2.4 km) north of Owego.	185	1930-78*, 1979-80	3-22-80	7.78	5,910
01521596	Big Creek near Howard, NY	Lat 42°22'01", long 77°34'33", Steuben County, Hydrologic Unit 02050104, at culvert on town road, 0.1 mi (0.2 km) south of State Highway 70, 1.3 mi (2.1 km) north of Butch Corner, 3.4 mi (5.5 km) west of Howard, and 6.2 mi (10.0 km) upstream from mouth.	6.36	1977-80	11-26-79	14.18	90
01525500	Canisteo River at West Cameron, NY	Lat 42°13'20", long 77°25'05", Steuben County, Hydrologic Unit 02050104, on right bank 250 ft (76 m) downstream from bridge on County Highway 119, 0.3 mi (0.5 km) southeast of West Cameron, and 1.7 mi (2.7 km) north of Cameron.	340	1930-31*, 1937-70*, 1971-72, 1974-80	11-26-79	11.28	5,940

* Operated as a continuous-record gaging station.
a Approximately.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1980--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft³/s)
		Susquehanna River basin--Continued					
01530301	Cuthrie Run near Big Flats, NY	Lat 42°10'43", long 76°55'32", Chemung County, Hydrologic Unit 02050105, at culvert on Breed Hollow Road, 0.9 mi (1.4 km) north of intersection of Eacher Hollow Road and Breed Hollow Road, 2.3 mi (3.7 km) north of State Highway 17, and 3.0 mi (4.8 km) north of Big Flats.	5.39	1976, 1979-80	3-22-80	15.47	260
		Allegheny River basin					
03010734	Ischua Creek tributary near Machias, NY	Lat 42°24'28", long 78°33'33", Cattaraugus County, Hydrologic Unit 05010001, at culvert on Very Road, 0.2 mi (.32 km) upstream from mouth, 0.7 mi (1.1 km) north of State Highway 242, and 1.5 mi (2.4 km) west of Machias.	5.12	1978-80	3-21-80	8.74	430
03010800	Olean Creek near Olean, NY	Lat 42°07'12", long 78°25'12", Cattaraugus County, Hydrologic Unit 05010001, on right bank at upstream side of highway bridge, 1,000 ft (300 m) west of State Highway 16, 1.4 mi (2.3 km) northeast of Olean, and 4.6 mi (7.4 km) upstream from mouth.	198	1959-68*, 1970-80	12-26-79	9.50	2,960
03011000	Great Valley Creek near Salamanca, NY	Lat 42°10'28", long 78°41'28", Cattaraugus County, Hydrologic Unit 05010001, at bridge on old State Highway 98, 275 ft (84 m) upstream from bridge on U. S. Highway 219, 1.5 mi (2.4 km) northeast of Salamanca, and 2.1 mi (3.4 km) upstream from mouth.	137	1950-68*, 1977-80	12-26-79	14.24	4,200
03012837	West Branch Conewango Creek tributary near Hamlet, NY	Lat 42°21'55", long 79°10'17", Chautauqua County, Hydrologic Unit 05010002, at culvert on Hamlet Road, 0.1 mi (0.2 km) west of the intersection of State Highway 83 and Hamlet Road, 1.0 mi (1.6 km) upstream from mouth, and 1.9 mi (3.1 km) west of Hamlet.	6.84	1977-80	12-25-79	16.09	-
03013800	Ball Creek at Stow, NY	Lat 42°09'14", long 79°24'25", Chautauqua County, Hydrologic Unit 05010002, on left bank 75 ft (23 m) upstream from bridge on State Highway 394 at Stow, and 0.4 mi (0.6 km) upstream from mouth.	9.06	1955-66, 1974*, 1975-80	6-20-80	17.24	957
		Streams tributary to Lake Erie					
04213490	South Branch Cattaraugus Creek near Otto, NY	Lat 42°21'54", long 78°48'06", Cattaraugus County, Hydrologic Unit 04120102, at highway bridge, 0.2 mi (0.3 km) upstream from Mansfield Creek, and 1.7 mi (2.7 km) northeast of Otto.	25.6	1963-80	3-21-80	6.37	1,660
04214040	Delaware Creek near Angola, NY	Lat 42°37'46", long 79°03'15", Erie County, Hydrologic Unit 04120103, at bridge on State Highway 5, 1.5 mi (2.4 km) southwest of Angola, and 1.6 mi (2.6 km) upstream from mouth.	8.15	1963-80	12-25-79	b5.55	-

* Operated as a continuous-record gaging station.

b Ice jam.

Annual maximum discharge at crest-stage partial-record stations during water year 1980--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Dis-charge (ft³/s)
		Streams tributary to Lake Erie--Continued					
04214410	Hunter Creek at Colegrave, NY	Lat 42°44'11", long 78°32'55", Erie County, Hydrologic Unit 04120103, at bridge on Center Line Road, 0.3 mi (0.5 km) east of Colegrave, and 3.5 mi (5.6 km) upstream from mouth.	14.0	1964-80	3-2[illegible]-80	4.73	630
04214980	Little Buffalo Creek near East Lancaster, NY	Lat 42°52'46", long 78°36'27", Erie County, Hydrologic Unit 04120103, at bridge on Schwartz Road, 1.9 mi (3.1 km) southeast of East Lancaster, and 2.9 mi (4.7 km) upstream from mouth.	23.9	1963-73, 1976-80	3-17-63 12-25-79	8.86 6.15	R2,140 592
		Streams tributary to Niagara River					
04216400	Tonawanda Creek near Johnsonburg, NY	Lat 42°43'05" long 78°19'18", Wyoming County, Hydrologic Unit 04120104, on State Highway 98 near Johnsonburg, and 0.6 mi (1.0 km) downstream from East Fork.	23.6	1962-80	3-21-80	6.49	562
04216875	Little Tonawanda Creek Tributary near Batavia, NY	Lat 43°56'33", long 78°09'46", Genesee County, Hydrologic Unit 04120104, at culvert on Francis Road, 1.6 mi (2.6 km) upstream of mouth, and 2.9 mi (4.7 km) south of the city limits of Batavia.	1.01	1976-80	6-20-80	11.49	63
04217700	Murder Creek at Pembroke, NY	Lat 42°59'37", long 78°26'08", Genesee County, Hydrologic Unit 04120104, at Lake Road bridge, 0.3 mi (0.5 km) south of Pembroke, and 12.5 mi (20.1 km) west of Batavia.	43.9	1962-72, 1974-80	3-21-80	7.43	728
04219645	Fourmile Creek near Youngstown, NY	Lat 43°13'49", long 79°01'01", Niagara County, Hydrologic Unit 04120104, at culvert on Balmer Road, 200 ft (61 m) east of State Highway 18, 1.5 mi (3.2 km) southeast of Youngstown, and 3.4 mi (5.5 km) above the mouth.	4.88	1970-73, 1976-80,	12-25-79 3-21-80	8.57 8.55	215 220
		Streams tributary to Lake Ontario					
04219738	Eighteenmile Creek tributary near Lockport, NY	Lat 43°12'20", long 78°46'47", Niagara County, Hydrologic Unit 04130001, at culvert on Budd Road, 3.3 mi (5.3 km) northwest of Lockport and 4.1 mi (6.6 km) upstream from mouth.	2.53	1979-80	12-25-79	12.69	135
04219900	Johnson Creek near Lyndonville, NY	Lat 43°20'21", long 78°20'55", Orleans County, Hydrologic Unit 04130001, at bridge on Woodworth Road, 3.3 mi (5.3 km) downstream from dam at Lyndonville, and 4.4 mi (7.1 km) upstream from mouth.	87.7	1962-70, 1972-73, 1976-80	12-25-79	5.79	1,260
04219922	Oak Orchard Creek at Barrville Road near Elba, NY	Lat 43°05'42", long 78°08'43", Genesee County, Hydrologic Unit 04130001, at culvert on Barrville Road, 2.3 mi (3.7 km) northeast of Elba, and 6.0 mi (9.6 km) north of Batavia.	6.34	1976-80	3-21-80	8.08	97
04220245	West Creek near Hamlin, NY	Lat 43°17'42", long 77°53'32", Monroe County, Hydrologic Unit 04130001, at culvert on Hamlin Center Road, 1.5 mi (2.4 km) east of State Highway 19, and 1.6 mi (2.6 km) southeast of Hamlin.	4.56	1978-80	12-25-79	b5.81	-

b Ice jam.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1980--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi²)	Period of record	Date	Gage height (feet)	Discharge (ft³/s)
		Streams tributary to Lake Ontario--Continued					
04221769	Black Creek at Hyder Flats Road at Black Creek, NY	Lat 42°16'03", long 78°13'38", Allegany County, Hydrologic Unit 04130002, at culvert on Hyder Flats Road, 0.6 mi (1.0 km) south of Black Creek, and 8.5 mi (13.7 km) upstream from mouth.	10.6	1978-80	12-26-79	5.70	575
04222600	Wiscoy Creek at Bliss, NY	Lat 42°34'59", long 78°14'16", Wyoming County, Hydrologic Unit 04130002, at bridge on county road, 0.1 mi (0.2 km) north of State Highway 39, and 0.6 mi (1.0 km) east of Bliss.	21.8	1962-65, 1967-80	12-25-79	2.62	-
04224700	Sugar Creek near Ossian, NY	Lat 42°30'52", long 77°48'12", Livingston County, Hydrologic Unit 04130002, on right bank 300 ft (91 m) downstream from bridge on Linzy Road, 1.3 mi (2.1 km) southwest of Ossian, and 5.1 mi (8.2 km) upstream from mouth.	9.83	1964-73, 1975, 1977-80	3-21-80	4.05	348
04224900	Mill Creek at Patchinville, NY	Lat 42°31'13", long 77°35'06", Steuben County, Hydrologic Unit 04130002, at bridge on Ellinger Road, 0.1 mi (0.2 km) east of State Highway 21, 0.8 mi (1.3 km) south of Patchinville, 3.3 mi (5.3 km) south of Wayland, and 9.1 mi (14.6 km) upstream from mouth.	5.00	1964-80	3-22-80	2.19	236
04231040	Hotel Creek at Griffin Road near Churchville, NY	Lat 43°03'36", long 77°52'28", Monroe County, Hydrologic Unit 04130003, at bridge on Griffin Road, 3.0 mi (4.8 km) upstream from mouth, and 3.1 mi (5.0 km) southeast of Churchville.	4.57	1976-80	12-25-79	12.13	53
042320527	Mill Creek tributary near Webster,NY	Lat 43°14'45", long 77°26'43", Monroe County, Hydrologic Unit 04140101, at culvert on Woodboro Farms Road, 400 ft (120 m) east of Holt Road, and 1.8 mi (2.9 km) north of Webster.	1.80	1971-72, 1976-80	12-25-79	12.27	123
042320578	Bear Creek at Ontario, NY	Lat 43°13'30", long 77°17'00", Wayne County, Hydrologic Unit 04140101, at culvert on New Street in Ontario, 100 ft (30 m) west of Furnaceville Road, and 4.0 mi (6.4 km) upstream from mouth.	6.74	1971-73, 1975-80	4-13-71 4- 1-72 4- 5-73 12-25-79	12.19 11.84 11.69 12.18	111 89 80 102
04232071	Second Creek tributary at Alton, NY	Lat 43°12'36", long 76°59'32", Wayne County, Hydrologic Unit 04140101, at culvert on Bond Road, 200 ft (60 m) south of U.S. Highway 104, 0.3 mi (0.5 km) from mouth, and 0.6 mi (1.0 km) west of Alton.	1.07	1970, 1973, 1976-80	4- 2-70 4- 5-73 3- 5-79 12-25-79	12.87 12.07 12.48 12.75	45 24 - -
04232087	Red Creek tributary No. 16 near Red Creek, NY	Lat 43°13'36", long 76°42'23", Cayuga County, Hydrologic Unit 04140101, at culvert on town road (Red Creek Road), 1.3 mi (2.1 km) southeast of Red Creek.	2.90	1976-80	11-27-79	8.17	106

Annual maximum discharge at crest-stage partial-record stations during water year 1980--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		Streams tributary to Lake Ontario--Continued					
04232460	Sugar Creek at Guyanoga, NY	Lat 42°37'23", long 77°09'30", Yates County, Hydrologic Unit 04140201, at bridge on Sid White Road, 0.4 mi (0.6 km) east of Guyanoga, and 2.3 mi (3.7.km) upstream from mouth.	28.9	1966-80	2-12-66	2.99	163
					9-29-67	2.31	91
					6-26-68	2.93	156
					4-24-69	2.46	105
					4- 2-70	3.09	R176
					3-16-71	3.70	263
					6-23-72	3.64	R254
					12- 6-72	2.30	R 90
					4- 4-74	2.38	R 98
					2-24-75	3.28	R201
					2-17-76	4.11	R333
					9-25-77	4.09	R330
					4- 2-78	3.81	R281
					3- 5-79	4.20	R350
					3-21-80	4.14	339
04232630	Kendig Creek near MacDougall, NY	Lat 42°50'57", long 76°53'33", Seneca County, Hydrologic Unit 04140201, at downstream side of bridge on County Highway 120, 3.0 mi (4.8 km) north of MacDougall, 3.5 mi (5.6 km) southwest of Waterloo, and 4.6 mi (7.4 km) upstream from mouth.	13.8	1965-68*, 1969-80	11-26-79	5.48	515
04233255	Cayuga Inlet at Ithaca, NY	Lat 42°25'38", long 76°31'19", Tompkins County, Hydrologic Unit 04140201, on upstream abutment face of flood-control weir, at east end of Burtt Place, south of Ithaca city line, 0.3 mi (0.5 km) east of State Highway 13a, 0.9 mi (1.4 km) downstream from Buttermilk Creek, and 2.4 mi (3.9 km) upstream from mouth.	86.7	1971-72, 1975-80	3-22-80	8.91	2,860
04233310	Sixmile Creek near Ithaca, NY	Lat 42°24'33", long 76°27'14", Tompkins County, Hydrologic Unit 04140201, at bridge on Burns Road, 1.8 mi (2.9 km) southeast of Ithaca, and 4.4 mi (7.1 km) upstream from mouth.	42.0	1967-69, 1971-73, 1976-80	3-22-80	6.99	2,740
04233676	Virgil Creek at Mill Street, Dryden, NY	Lat 42°29'18", long 76°18'08", Tompkins County, Hydrologic Unit 04140201,at bridge on Mill Street at Dryden, and 0.1 mi (0.2 km) upstream from Dryden Lake Outlet.	20.7	1966-70, 1972, 1975-80	3-22-80	4.05	985
04233700	Virgil Creek at Freeville, NY	Lat 42°30'18", long 76°21'01", Tompkins County, Hydrologic Unit 04140201, on left bank, 10 ft (3 m) upstream from bridge on Johnson Street in Freeville, and 0.8 mi (1.3 km) upstream from Fall Creek.	40.3	1974-75*, 1976-80	3-22-80	17.20	1,250
042340202	Cayuga Lake tributary No. 8 near Jacksonville, NY	Lat 42°32'24", long 76°35'35", Tompkins County, Hydrologic Unit 04140201, at culvert on State Highway 89 (Taughannock Buolevard), 0.1 mi (0.2 km) upstream from mouth, and 2.4 mi (3.9 km) northeast of Jacksonville.	1.36	1977-80	11-26-79	7.20	140
042340588	Yawger Creek tributary near Auburn, NY	Lat 42°54'41", long 76°39'46", Cayuga County, Hydrologic Unit 04140201, at culvert on Chamberlain Road, 3.5 mi (5.6 km) west of Auburn, and 4.3 mi (6.9 km) upstream from mouth.	1.76	1976-80	11-27-79	13.92	88

* Operated as a continuous-record gaging station.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1980--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		Streams tributary to Lake Ontario--Continued					
04234138	Schaeffer Creek near Canandaigua NY	Lat 42°54'25", long 72°22'14", Ontario County, Hydrologic Unit 04140201, at culvert on McCann Road, 0.8 mi (1.3 km) upstream from Mud Creek, 1.7 mi (2.7 km) north of U.S. Highway 20, and 3.2 mi (5.1 km) west of Canandaigua.	7.84	1980	3-22-80	11.49	218
04234200	Mud Creek at East Victor, NY	Lat 42°58'28", long 77°22'57, Ontario County, Hydrologic Unit 04140201, 25 ft (8 m) downstream from bridge on State Highway 96, 0.3 mi (0.5 km) upstream from Fish Creek, at East Victor.	64.2	1958-68*, 1972, 1976-80	12-25 79	6.02	1,130
04234363	Marbletown Creek tributary near Newark, NY	Lat 43°02'47", long 77°02'57", Wayne County, Hydrologic Unit 04140201, at culvert at intersection of Brumm and Sutton Roads, and 1.2 mi (1.9 km) east of Newark.	0.58	1976-80	12-25-79	4.81	23
04235255	Canandaigua Outlet tributary near Alloway, NY	Lat 43°00'21", long 77°00'54", Ontario County, Hydrologic Unit 04140201, at bridge on Pre-Emption Road, 0.5 mi (0.8 km) south of Wayne-Ontario County line, 1.8 mi (2.9 km) southwest of Alloway, and 2.9 mi (4.7 km) upstream from mouth.	2.94	1978-80	12-25-79 3-21-80	6.16 6.07	84 92
04235276	Black Brook at Tyre, NY	Lat 42°59'30", long 76°48'13", Seneca County, Hydrologic Unit 04140201, at bridge on County Highway 101, in village of Tyre, and 0.8 mi (1.3 km) upstream from mouth.	19.0	1966-73, 1975-80	11-26-79	3.57	384
04242795	Canada Creek tributary near Lee Center, NY	Lat 43°19'40", long 75°31'52", Oneida County, Hydrologic Unit 04140202, at culvert on Streum Road at Negro Road, 1.6 mi (2.6 km) upstream from mouth, 1.7 mi (2.7 km) northwest of Lee Center, and 7.6 mi (12.2 km) northwest of Rome.	1.34	1977-80	4- 9-80	2.91	70
04245840	Scriba Creek near Constantia, NY	Lat 43°15'35" long 76°00'11", Oswego County, Hydrologic Unit 04140202, on right bank, 8 ft (2 m) upstream from road to Ingersol Road, and about 0.8 mi (1.3 km) north of village of Constantia.	38.4	1966-68*, 1969, 1971-80	4-10-80	5.81	679
04249050	Catfish Creek at New Haven, NY	Lat 43°29'00", long 76°19'34", Oswego County, Hydrologic Unit 04140102, at bridge on State Highway 104B, at New Haven, and 1.4 mi (2.3 km) upstream from mouth.	31.7	1962-66, 1968-80	3-22-80	5.64	502

* Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1980

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Susquehanna River basin				
01501004 c/ Mill Brook	Unadilla River	Lat 42°38'13", long 75°21'07", Chenango County, Hydrologic Unit 02050101, at culvert on Sherburne Turnpike, 0.5 mi (0.8 km) northwest of New Berlin, and 1.6 mi (2.6 km) upstream from mouth.	1.78	1975-79	6-26-80	•0.14
					7-22-80	•.19
					8-27-80	•.12
					9-18-80	•.13
01501008 c/ Mill Brook Tributary	Mill Brook	Lat 42°37'34", long 75°21'06", Chenango County, Hydrologic Unit 02050101, at culvert on town highway, 0.4 mi (0.6 km) west of New Berlin, and 0.7 mi (1.1 km) upstream from mouth.	1.70	1975-79	6-26-80	•0.19
					7-22-80	•.50
					8-27-80	•.14
					9-18-80	•.58
‡01502701 Susquehanna River	Atlantic Ocean	Lat 42°13'38", long 75°31'27", Chenango County, Hydrologic Unit 02050101, at bridge on State Highway 41 at Afton.	1,716	1972, 1977, 1979	11- 8-78	1,310
					3- 6-79	37,900
					3- 6-79	37,000
					3- 7-79	37,800
					3- 8-79	23,000
					6-15-79	1,050
					7-25-79	510
					11- 8-79	2,530
					11-28-79	8,840
					3-23-80	22,900
‡01502714 Ouaquaga Creek	Susquehanna River	Lat 42°10'12", long 75°40'45", Broome County, Hydrologic Unit 02050101, at culvert on Kane Road, 2.3 mi (3.7 km) south of Belden, 2.8 mi (4.5 km) west of Harpursville, and 4.5 mi (7.2 km) upstream from mouth.	3.37	1976	2-27-76	19.2
					3-21-80	42.3
‡01505017 Cold Brook	Chenango River	Lat 42°36'30", long 75°32'16", Chenango County, Hydrologic Unit 02050102, at culvert on town road, 0.4 mi (0.6 km) west of railroad tracks, 0.8 mi (1.3 km) southwest of North Norwich, and 1.8 mi (2.9 km) upstream from mouth.	5.80		3-18-80	49.9
01508800 c/ Factory Brook	West Branch Tioughnioga River	Lat 42°38'39", long 76°11'19", Cortland County, Hydrologic Unit 02050102, at bridge on State Highway 281, in Homer, and 1.1 mi (1.8 km) upstream from mouth.	15.8	1962-66, 1970, 1972-79	12-10-79	•12.0
					5- 1-80	•17.8
					8- 5-80	•7.47
					9-25-80	•2.43
‡01510610 Merrill Creek tributary	Merrill Creek	Lat 42°28'03", long 75°59'19", Cortland County, Hydrologic Unit 02050102, at bridge on town road, 0.3 mi (0.5 km) upstream from mouth, and 1.4 mi (2.3 km) southwest of Texas Valley.	5.32	1977	4-14-77	4.07
					3-21-80	166
‡01513500 a/ Susquehanna River	Atlantic Ocean	Lat 42°05'27", long 76°03'23", Broome County, Hydrologic Unit 02050103, on left bank 400 ft (120 m) downstream from highway bridge at Vestal, and 800 ft (240 m) upstream from Choconut Creek.	3,941	1967-78	4- 6-78	36,700
					3-23-80	40,500
‡01513712 Nanticoke Creek tributary	Nanticoke Creek	Lat 42°16'40", long 76°02'51", Broome County, Hydrologic Unit 02050103, at culvert on Rabbit Road, 0.4 mi (0.6 km) northeast of Nanticoke, and 0.6 mi (1.0 km) upstream from mouth.	1.70	1976	7-11-76	1,780
					3-21-80	20.4
		Streams tributary to Lake Erie				
04215368 East Branch Cazenovia Creek	Cazenovia Creek	Lat 42°45'26", long 78°38'42", Erie County, Hydrologic Unit 04120103, at bridge on Jewett-Holmwood Road, 1.0 mi (1.6 km) southwest of East Aurora.			8-20-80	•9.45

• Base flow.
a/ Previously operated as a continuous-record gaging station.
c/ Water-quality data included in this report.
‡ Also a crest-stage partial-record station.

Discharge measurements made at miscellaneous sites during water year 1980--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
		Streams tributary to Lake Erie--Continued				
04215375 Cazenovia Creek	Buffalo River	Lat 42°46'47", long 78°41'00", Erie County, Hydrologic Unit 04120103, at bridge on Willardshire Road, 2.8 mi (4.5 km) northwest of East Aurora.			8-20-80	*18.7
		Streams tributary to Lake Ontario				
‡04222600 Wiscoy Creek	Genesee River	Lat 42°34'59", long 78°14'16", Wyoming County, Hydrologic Unit 04130002, at bridge on County Highway 37, 0.1 mi (0.2 km) north of State Highway 39, and 0.6 mi (1.0 km) east of Bliss.	21.8	1961-62, 1964-65, 1972, 1977	3-26-77	46.8
					4-28-77	58.7
					5-16-77	33.8
					6-20-77	16.8
					3-19-80	60.3
‡04224700 Sugar Creek	Canaseraga Creek	Lat 42°30'52", long 77°48'12", Livingston County, Hydrologic Unit 04130002, on right bank 300 ft (91 m) downstream from bridge on Linzy Road, 1.3 mi (2.1 km) southwest of Ossian, and 5.1 mi (8.2 km) upstream from mouth.	9.83	1964-66, 1970-72, 1976-77	4-14-76	6.85
					3-26-77	13.9
					4-27-77	19.6
					3-19-80	26.7
04227997 Conesus Creek	Genesee River	Lat 42°50'42", long 77°42'30", Livingston County, Hydrologic Unit 04130003, 60 ft (18 m) upstream from sewer treatment plant staff gage adjacent to U.S. Highway 15, 0.8 mi (1.3 km) north of U.S. Highway 20A and Lakeville.			5-14-80	46.9
042320502 c/ Irondequoit Creek	Lake Ontario	Lat 43°09'27", long 77°31'37", Monroe County, Hydrologic Unit 04140101, on right bank 200 ft (61 m) downstream from bridge on Browncroft Boulevard (State Highway 286A), 0.6 mi (1.0 km) east of State Highway 47, and 2.2 mi (3.5 km) upstream from mouth.	133	1976-79	10-18-79	87.2
					11-27-79	190
					12-13-79	83.3
					1-23-80	88.1
					3-27-80	250
					4- 2-80	282
					4-30-80	213
					5-21-80	76.2
					5-22-80	72.1
					6-10-80	262
					6-19-80	70.9
					6-20-80	136
					8-19-80	38.8
					9-23-80	79.4
‡04232460 Sugar Creek	Keuka Lake	Lat 42°37'23", long 77°09'30", Yates County, Hydrologic Unit 04140201, at bridge on Sid White Road, 0.4 mi (0.6 km) east of Guyanoga, and 2.3 mi (3.7 km) upstream from mouth.	28.9	1955, 1964-66, 1970-72, 1977-79	3-19-80	44.1
					3-22-80	188
04234032 Trumansburg Creek	Cayuga Lake	Lat 42°32'31", long 76°38'52", Tompkins County, Hydrologic Unit 04140201, at bridge on town road in Trumansburg, and 1.8 mi (2.9 km) upstream from mouth.	13.1	1935, 1955, 1964-66	10- 9-79	*0.86
‡042340588 Yawger Creek tributary	Yawger Creek	Lat 42°54'41", long 76°39'46", Cayuga County, Hydrologic Unit 04140201, at culvert on Chamberlain Road, 3.5 mi (5.6 km) west of Auburn, and 4.3 mi (6.3 km) upstream from mouth.	1.76		3-31-80	4.17
04242739 Old Erie Canal Feeder	Oneida Lake	Lat 43°01'56", long 76°00'51", Onondaga County, Hydrologic Unit 04140202, at downstream side of bridge on village road, 50 ft (15 m) downstream from diversion spillway, 700 ft (213 m) downstream from USGS gaging station (Limestone Creek at Fayetteville 04245000), and 800 ft (244 m) north of Genesee Street, at Fayetteville.		1978-79	6-18-80	*5.57
					7-22-80	*4.12
					9- 4-80	*4.96

* Base flow.
c/ Water-quality data included in this report.
‡ Also a crest-stage partial-record station.

Discharge measurements made at miscellaneous sites during water year 1980--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		Streams tributary to Lake Ontario--Continued				
04245003 Limestone Creek	Oneida Lake	Lat 43°01'56", long 76°00'51", Onondaga County, Hydrologic Unit 04140202, 25 ft (8 m) downstream from dropstructure, 800 ft (244 m) downstream from bridge on Genesee Street at Fayetteville, 700 ft (213 m) downstream from USGS gaging station (Limestone Creek at Fayetteville 04245000), and 7.75 mi (12.5 km) upstream from mouth.	85.6	1978-79	6-18-80 7-22-80 9- 4-80	69.0 31.7 23.0
04245016 Old Erie Canal Feeder	Limestone Creek	Lat 43°02'10", long 76°00'43", Onondaga County, Hydrologic Unit 04140202 at footbridge over overflow channel, 20 ft (6 m) upstream from Limestone Creek, 2,000 ft (610 m) downstream from Limestone Creek Diversion, and 2,700 ft (823 m) downstream from USGS gaging station (Limestone Creek, at Fayetteville 04245000).		1978-79	6-18-80 7-22-80 9- 4-80	1.02 .85 .66
04245040 Bishop Brook	Limestone Creek	Lat 43°02'16", long 76°00'38", Onondaga County, Hydrologic Unit 04140202, at downstream side of footbridge, 100 ft (30 m) upstream from Limestone Creek, 2,200 ft (671 m) downstream from Limestone Creek Diversion, and 2,900 ft (884 m) downstream from USGS gaging station (Limestone Creek at Fayetteville 04245000).	3.93	1978-79	6-18-80 7-22-80 9- 4-80	•1.62 •.93 •.50
‡04245840 a/ Scriba Creek	Oneida Lake	Lat 43°15'35", long 76°00'11", Oswego County, Hydrologic Unit 04140202, on right bank, 8 ft (2 m) upstream from road to Ingersol Road, and about 0.8 mi (1.3 km) north of village of Constantia.	38.4	1966-69, 1978-79	12-27-79 3-25-80	254 351

• Base flow.
a/ Previously operated as a continuous-record gaging station.
‡ Also a crest-stage partial-record station.

SUSQUEHANNA RIVER BASIN

NEAR ATHENS, PA

LOCATION.--Lat 41°55'31", long 76°31'35", Bradford County, Hydrologic Unit 02050105, at National Weather Service station "Milan 1N," 300 ft west of U.S. Highways 220 and 309, 0.6 mi (1.0 km) west of the mouth of the Chemung River, 2.0 mi (3.2 km) south of Athens, and 5.1 mi (8.2 km) south of the New York-Pennsylvania State line.

PERIOD OF RECORD.--Water years 1966 to current year (monthly composite).

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling. Analysis of samples for 1979 water year were delayed beyond the usual time period. Specific conductance and pH were measured within approximately 2 months after end of composite period. However, chemical analyses were not done until the end of the water year. From time of receipt until analysis all samples were stored at 4°C.

WATER QUALITY DATA, PERIOD OCTOBER 1978 TO SEPTEMBER 1980

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)
78/10/01 TO 78/10/31	2.40	.40	.16	.00	.07	5.70	.34	.0
78/12/01 TO 79/01/01	2.70	.21	.37	.46	.12	6.80	.66	.1
79/01/01 TO 79/01/31	3.25	.20	.18	.06	.02	3.40	.18	.1
79/01/31 TO 79/03/01	1.90	.27	.13	.28	.02	3.80	.53	.0
79/03/01 TO 79/04/02	2.90	.33	.14	.35	.14	3.90	.57	.0
79/04/02 TO 79/04/30	2.50	.45	.17	.05	.08	5.20	.26	.0
79/06/30 TO 79/07/31	1.59	1.20	.32	.07	.45	8.60	.26	.1
79/10/09 TO 79/11/01	.95	----	----	----	----	7.90	.51	---
79/11/01 TO 79/12/02	3.60	.45	.27	.53	.15	5.20	.79	.1
79/12/02 TO 80/01/01	.70	----	----	----	----	8.10	1.30	---
80/03/02 TO 80/04/01	3.40	.38	.11	.14	.02	4.80	.46	.1
80/04/01 TO 80/05/01	4.20	.42	.10	.00	.05	1.90	.23	.0
80/05/01 TO 80/06/01	2.75	1.30	.32	.10	.26	8.30	.66	---
80/06/01 TO 80/07/01	3.40	.65	.13	.06	.20	4.70	.08	---
80/07/01 TO 80/08/01	2.40	.80	.30	.22	.95	6.80	.63	---
80/08/01 TO 80/09/01	2.10	1.50	.31	.11	.34	14.0	.67	---
80/09/01 TO 80/10/01	2.00	.57	.07	.22	.24	5.80	.08	---

PERIOD OF COLLECTION	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-(MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
78/10/01 TO 78/10/31	.951	.000	-----	.033	29	4.10	.116	38
78/12/01 TO 79/01/01	.627	.167	-----	.104	34	5.55	.083	85
79/01/01 TO 79/01/31	1.000	.056	-----	.040	22	4.50	.072	46
79/01/31 TO 79/03/01	1.200	.267	-----	.024	18	4.20	.095	24
79/03/01 TO 79/04/02	1.200	.189	-----	.035	26	4.77	.088	13
79/04/02 TO 79/04/30	.716	.256	-----	.037	26	5.16	.074	10
79/06/30 TO 79/07/31	1.200	1.900	-----	.127	43	4.57	.147	46
79/10/09 TO 79/11/01	-----	-----	-----	-----	41	5.97	.080	---
79/11/01 TO 79/12/02	.802	1.800	-----	.020	26	6.30	-----	26
79/12/02 TO 80/01/01	1.800	3.800	-----	.067	--	----	-----	---
80/03/02 TO 80/04/01	1.000	1.600	-----	.031	21	5.80	.163	13
80/04/01 TO 80/05/01	.594	1.000	-----	.020	11	5.10	.086	9
80/05/01 TO 80/06/01	1.900	2.500	-----	.143	60	4.36	.134	19
80/06/01 TO 80/07/01	.860	1.000	-----	.043	40	4.24	.134	26
80/07/01 TO 80/08/01	1.500	.330	-----	.504	42	5.10	.142	---
80/08/01 TO 80/09/01	2.300	.950	-----	.124	102	3.73	-----	---
80/09/01 TO 80/10/01	1.300	1.700	1.600	.061	43	4.17	-----	20

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ALLEGHENY RIVER BASIN

AT ALLEGANY STATE PARK NY

LOCATION.--Lat 42°06'00", long 78°45'00", Cattaraugus County, Hydrologic Unit 05010001, at National Weather Service station "Allegany State Park," 100 ft (30 m) west of Park Administration Building, 300 ft (91 m) west of Park Highway 1, and 6.0 mi (9.7 km) south of Salamanca.

PERIOD OF RECORD.--Water years 1966 to current year (monthly composite).

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling. Analysis of samples for 1979 water year were delayed beyond the usual time period. Specific conductance and pH were measured within approximately 2 months after end of composite period. However, chemical analyses were not done until the end of the water year. From time of receipt until analysis all samples were stored at 4°C.

WATER QUALITY DATA, PERIOD OCTOBER 1978 TO SEPTEMBER 1980

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)
78/10/02 TO 78/12/01	6.98	.56	.10	.08	.01	6.50	.12	.1
78/12/01 TO 79/01/01	3.86	.42	.09	.20	.08	6.80	.24	---
79/01/01 TO 79/02/01	6.45	.17	.04	.12	.07	1.80	.22	.0
79/02/01 TO 79/03/01	2.46	.26	.01	.14	.02	2.00	.09	.0
79/03/01 TO 79/04/02	2.79	.75	.18	.21	.04	4.40	.25	.1
79/04/02 TO 79/05/01	3.56	----	----	----	----	6.90	.30	.1
79/07/01 TO 79/10/15	14.58	.46	.10	.11	.04	7.30	.26	.1
79/10/15 TO 79/11/01	1.09	----	----	----	----	3.40	.25	---
79/11/01 TO 79/12/03	3.31	----	.41	----	----	6.20	1.00	.1
79/12/03 TO 79/12/31	3.94	.61	.04	.22	.10	1.20	.24	.0
79/12/31 TO 80/02/01	2.07	1.30	.56	.21	.03	2.90	.21	.0
80/02/01 TO 80/02/27	.99	----	----	----	----	3.40	.80	.1
80/02/27 TO 80/03/31	4.45	.34	.06	.08	.01	2.80	.21	.0
80/03/31 TO 80/05/01	3.21	.96	.21	----	.05	2.90	.16	.0
80/05/01 TO 80/06/01	1.55	1.00	.27	.04	.19	5.80	.26	---
80/06/01 TO 80/07/01	4.84	.63	.23	.08	.32	4.30	.08	---
80/07/02 TO 80/08/01	2.13	.91	.24	.06	.24	9.60	.27	---
80/08/01 TO 80/09/01	4.39	.33	.06	.02	.08	3.70	.23	---
80/09/01 TO 80/10/01	3.88	.31	.03	.16	.07	3.20	.03	---

PERIOD OF COLLECTION	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-(MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
78/10/02 TO 78/12/01	.708	.111	-----	.012	63	3.85	.192	90
78/12/01 TO 79/01/01	.833	.378	-----	.014	71	3.75	.249	70
79/01/01 TO 79/02/01	.452	.178	-----	.006	28	4.10	.100	22
79/02/01 TO 79/03/01	.460	.300	-----	.006	22	4.40	.082	36
79/03/01 TO 79/04/02	1.000	.422	-----	.005	47	4.08	.154	22
79/04/02 TO 79/05/01	.969	.444	-----	.001	62	4.00	.192	32
79/07/01 TO 79/10/15	.363	.189	-----	.026	61	3.90	.229	18
79/10/15 TO 79/11/01	.740	.246	-----	.020	--	----	-----	---
79/11/01 TO 79/12/03	.958	1.300	-----	.020	29	4.50	-----	---
79/12/03 TO 79/12/31	.660	.188	.390	.009	20	4.10	-----	18
79/12/31 TO 80/02/01	.823	.231	-----	.018	--	----	-----	---
80/02/01 TO 80/02/27	1.800	.378	-----	.026	25	3.96	.263	---
80/02/27 TO 80/03/31	.600	.150	-----	.011	22	4.18	.154	6
80/03/31 TO 80/05/01	.802	.421	-----	.011	26	4.20	.137	11
80/05/01 TO 80/06/01	1.200	.640	-----	.075	52	4.11	.139	6
80/06/01 TO 80/07/01	.480	.280	-----	.024	36	4.28	.134	11
80/07/02 TO 80/08/01	.280	.050	-----	.062	70	3.80	.244	---
80/08/01 TO 80/09/01	.670	.220	-----	.016	50	3.84	-----	9
80/09/01 TO 80/10/01	.570	.190	.210	.012	35	3.97	-----	9

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LAKE ONTARIO BASIN

AT PAVILION NY

LOCATION.--Lat 42°52'35", long 78°01'37", Genesee County, Hydrologic Unit 04130003, at National Weather Service station "Pavilion", 300 ft (91 m) east of Town of Pavilion garage, and 0.2 mi (0.3 km) west of the intersection of State Highways 63 and 19.

PERIOD OF RECORD.--October 1977 to June 1980 (monthly composite) discontinued.

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling. Analysis of samples for 1979 water year were delayed beyond the usual time period. Specific conductance and pH were measured within approximately 2 months after end of composite period. However, chemical analyses were not done until the end of the water year. From time of receipt until analysis all samples were stored at 4°C.

WATER QUALITY DATA, PERIOD OCTOBER 1978 TO JUNE 1980

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPI-TATION	CAL-CIUM (CA) (MG/L)	MAGNE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS-SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	FLUO-RIDE (F) (MG/L)
78/09/20 TO 78/11/01	3.83	2.60	.45	.09	.00	4.00	.48	.1
78/11/01 TO 79/01/01	5.54	3.40	.51	.38	34.0	5.20	.78	.1
79/01/01 TO 79/02/07	6.28	1.40	.63	.21	18.0	2.20	.22	.1
79/02/07 TO 79/04/12	6.59	2.80	.74	.60	31.0	4.80	.64	.1
79/07/01 TO 79/08/01	2.22	3.50	.72	.31	.17	7.40	.96	.2
79/11/01 TO 79/12/01	1.76	----	----	----	----	6.70	.66	.1
79/12/01 TO 80/01/01	3.49	2.10	.41	.19	.12	1.20	.26	.1
80/01/01 TO 80/02/01	1.27	----	----	----	----	5.20	2.30	.1
80/03/01 TO 80/04/01	4.06	2.50	.51	.50	25.2	4.30	.71	.0
80/04/01 TO 80/05/01	3.06	----	----	----	----	2.80	.34	---
80/05/01 TO 80/06/01	1.31	----	----	----	----	8.20	1.00	---
80/06/01 TO 80/06/12	2.81	2.30	.37	.18	18.6	2.30	.02	---

PERIOD OF COLLECTION	NIT-RITE+ NIT-RATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOS-PHORUS (P) (MG/L)	SPE-CIFIC CON-DUCTANCE (MICRO-(MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
78/09/20 TO 78/11/01	1.200	.044	-----	.037	--	5.85	.051	27
78/11/01 TO 79/01/01	1.800	.044	-----	.022	34	5.80	.046	46
79/01/01 TO 79/02/07	.615	.056	-----	.012	18	6.10	.038	4
79/02/07 TO 79/04/12	1.600	.056	-----	.010	31	5.80	.084	0
79/07/01 TO 79/08/01	1.100	.133	-----	.110	31	5.35	.092	---
79/11/01 TO 79/12/01	2.500	.305	-----	.030	--	----	-----	---
79/12/01 TO 80/01/01	.860	.083	-----	.019	11	6.20	-----	2
80/01/01 TO 80/02/01	-----	-----	-----	-----	--	----	-----	---
80/03/01 TO 80/04/01	1.200	.150	-----	.020	22	5.87	.880	6
80/04/01 TO 80/05/01	1.100	.170	-----	.030	24	6.06	.082	---
80/05/01 TO 80/06/01	1.500	.150	-----	.082	52	6.70	.048	---
80/06/01 TO 80/06/12	.380	.140	.120	.015	20	6.67	.055	1

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LAKE ONTARIO BASIN

AT MENDON PONDS

LOCATION.--Lat 43°01'17", long 77°35'01", Monroe County, Hydrologic Unit 04130003, in Mendon Ponds County Park, 200 ft (60m) east of rangers quarters, 300 ft (90 m) east of County Highway 65, 1.7 mi (2.8 km) south of Interstate Highway 90.

PERIOD OF RECORD.--June to September 1980 (monthly composite).
June to September 1980 (storm event wetfall).
June to September 1980 (monthly dustfall).

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level.

The wetfall and dustfall sample collector is an Aerochem Metrics Model 101 wet/dry precipitation collector. An automatic sensor detects occurances of precipitation, activating a motor which removes the cover from the wetfall collection vessel and covers the dustfall collection vessel. When the precipitation ceases, the cycle is reversed. The sampling vessels are polyethylene and have a collection diameter of 28.6 cm and a capacity of 13 liters. The openings of the collectors are approximately 8 ft (2.5 m) above ground level.

REMARKS.--Inches of precipitation are obtained from an on-site recording weighing bucket gage.

DUSTFALL CHEMICAL ANALYSES, PERIOD JUNE TO SEPTEMBER 1980

MONTHLY DUSTFALL

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)
80/06/01 TO 80/07/01	-----	1.10	.27	.31	1.30	7.70	.66	---
80/07/01 TO 80/08/05	-----	2.60	.94	.29	2.70	7.40	.43	---
80/08/05 TO 80/09/02	-----	1.70	.24	.30	.33	3.00	.12	---
80/09/02 TO 80/10/07	-----	1.90	.13	.23	.14	3.50	.40	---

PERIOD OF COLLECTION	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
80/06/01 TO 80/07/01	.960	2.300	2.700	.480	14	6.60	.048	15
80/07/01 TO 80/08/05	.660	1.300	5.100	1.500	44	6.05	-----	7
80/08/05 TO 80/09/02	.530	.210	.370	.045	17	6.19	-----	5
80/09/02 TO 80/10/07	.540	.134	.250	.024	12	5.80	-----	3

BULK CHEMICAL ANALYSES, PERIOD JUNE TO SEPTEMBER 1980

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)
80/06/05 TO 80/07/01	3.93	1.50	.24	.18	.68	6.00	.21	---
80/07/01 TO 80/08/05	2.42	.95	.20	.16	.40	1.70	.20	---
80/08/05 TO 80/09/02	4.48	.48	.09	.05	.04	5.30	.22	---
80/09/02 TO 80/10/07	2.99	.66	.04	.20	.70	5.70	.57	---

PERIOD OF COLLECTION	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
80/06/05 TO 80/07/01	.750	2.100	-----	.427	35	6.28	.051	9
80/07/01 TO 80/08/05	.170	.500	-----	.075	37	5.06	.078	2
80/08/05 TO 80/09/02	.580	.420	-----	.010	49	3.90	-----	11
80/09/02 TO 80/10/07	.660	.430	.380	.006	41	3.97	-----	11

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CHEMICAL QUALITY OF PRECIPITATION

LAKE ONTARIO BASIN

AT MENDON PONDS

WETFALL CHEMICAL ANALYSES, PERIOD JUNE TO SEPTEMBER 1980

STORM EVENT WETFALL

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)
80/06/10 TO 80/06/17	.38	.97	.11	.07	.04	2.90	.14	---
80/07/01 TO 80/08/05	2.42	.44	.08	.09	.06	5.90	.01	---
80/08/05 TO 80/09/02	4.48	.20	.03	.13	.05	4.00	.04	---
80/09/02 TO 80/10/07	2.99	.38	.01	.16	.03	5.10	.42	---

PERIOD OF COLLECTION	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-(MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
80/06/10 TO 80/06/17	.520	.320	.290	.001	28	4.43	.086	4
80/07/01 TO 80/08/05	.850	.510	.410	.014	63	3.78	-----	14
80/08/05 TO 80/09/02	.480	.310	.270	.015	48	3.84	-----	10
80/09/02 TO 80/10/07	.830	.470	.500	.005	44	3.90	-----	11

LAKE ONTARIO BASIN

AT MAYS POINT NY

LOCATION.--Lat 42°59'55", long 76°45'45", Wayne County, Hydrologic Unit 04140201, at National Weather Service station "Mays Point Lock 25," at Erie (Barge) Canal and State Highway 89, and 6.2 mi (10.0 km) south of Savannah.

PERIOD OF RECORD.--Water years 1966 to current year (monthly composite).

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a teflon receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling. Analysis of samples for 1979 water year were delayed beyond the usual time period. Specific conductance and pH were measured within approximately 2 months after end of composite period. However, chemical analyses were not done until the end of the water year. From time of receipt until analysis all samples were stored at 4°C.

WATER QUALITY DATA, WATER YEARS OCTOBER 1978 TO SEPTEMBER 1980

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)
78/09/30 TO 78/10/31	3.45	.61	.21	.06	.03	4.70	.28	.1
78/10/31 TO 78/12/01	1.42	.81	.27	----	.10	4.80	.51	---
78/12/01 TO 79/01/02	4.62	.41	.14	22.0	.03	2.40	.29	.0
79/04/01 TO 79/04/30	2.67	.87	.29	.08	.09	6.10	.43	.0
79/11/01 TO 79/11/30	4.22	.35	.05	.24	.05	2.70	.21	.0
79/12/01 TO 80/01/02	2.63	.68	.09	.23	.05	1.40	.27	.0
80/01/02 TO 80/02/04	.89	----	----	----	----	5.40	1.30	.2
80/03/03 TO 80/04/01	3.57	.51	.10	.21	.01	2.50	.29	.0
80/04/01 TO 80/05/01	3.39	.90	.20	----	.07	3.60	.25	---
80/05/01 TO 80/06/01	1.40	2.00	.50	.12	.38	8.80	.44	---
80/06/01 TO 80/07/01	4.84	1.00	.26	.14	.17	5.60	.10	---
80/07/01 TO 80/08/01	2.21	1.50	.37	.08	.13	8.30	.48	---
80/08/01 TO 80/09/01	1.18	2.10	.42	.20	.22	8.60	.66	---
80/09/01 TO 80/10/01	3.68	.93	.10	.26	.21	5.00	.23	---

PERIOD OF COLLECTION	NITRITE+ NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROCEN AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO- (MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
78/09/30 TO 78/10/31	1.200	.244	-----	.013	29	4.30	.122	120
78/10/31 TO 78/12/01	.452	.178	-----	.066	25	4.75	.073	140
78/12/01 TO 79/01/02	1.500	.356	-----	.009	22	4.60	.146	23
79/04/01 TO 79/04/30	.735	.356	-----	.027	33	3.60	.138	16
79/11/01 TO 79/11/30	.594	.212	-----	.020	22	4.00	-----	31
79/12/01 TO 80/01/02	.530	.250	-----	.017	10	4.60	-----	13
80/01/02 TO 80/02/04	-----	-----	-----	-----	--	----	-----	---
80/03/03 TO 80/04/01	.545	.180	-----	.012	14	4.30	.138	7
80/04/01 TO 80/05/01	.915	.561	-----	.013	32	4.10	.174	15
80/05/01 TO 80/06/01	1.100	1.800	-----	.031	41	5.84	.011	---
80/06/01 TO 80/07/01	.580	.660	-----	.047	36	4.35	.096	0
80/07/01 TO 80/08/01	.810	.890	-----	.108	54	4.07	.181	34
80/08/01 TO 80/09/01	.750	.420	-----	.094	57	4.00	-----	---
80/09/01 TO 80/10/01	.750	.250	.410	.031	50	4.01	-----	28

BROOME COUNTY

420646075531201. Local number, Bm 100.

LOCATION.--Lat 42°06'46", long 75°53'12", Hydrologic Unit 02050103, at Moeller and Frederick Streets, Binghamton. Owner: U.S. Geological Survey.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 52 ft (15.8 m), cased to 52 ft (15.8 m), slotted 40 ft (12.2 m) to 45 ft (13.7 m).

DATUM.--Altitude of land-surface datum is 850 ft (259 m), from topographic map. Measuring point: Top of coupling, at land-surface datum.

PERIOD OF RECORD.--October 1946 to July 1955, April 1966 to current year. Unpublished record for October 1946 to July 1955 (intermittent), April 1966 to April 1968 (intermittent) and May 1968 to September 1977 is available in files of the Geological Survey.

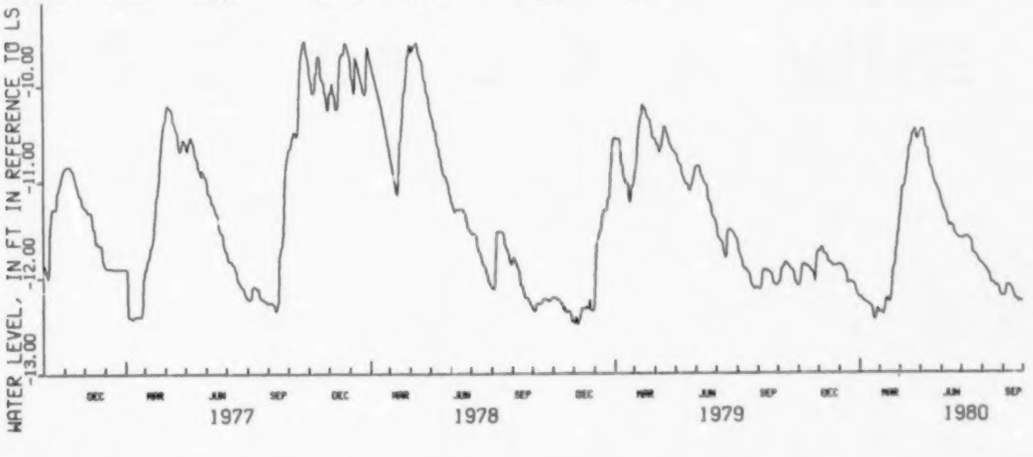
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.87 ft (2.70 m) below land-surface datum, July 3, 1972; lowest measured 12.83 ft (3.91 m) below land-surface datum, October 13, 1946.

EXTREMES FOR CURRENT YEAR.--Highest water level, 10.45 ft (3.19 m) below land-surface datum, April 23, 24; lowest, 12.44 ft (3.79 m) below land-surface datum, Feb. 21-24.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.07	12.09	11.73	11.87	12.21	12.37	11.35	10.49	11.17	11.60	11.87	12.20
2	12.06	12.09	11.72	11.87	12.21	12.37	11.29	10.49	11.21	11.60	11.87	12.20
3	12.05	12.06	11.74	11.87	12.21	12.36	11.22	10.46	11.23	11.60	11.88	12.20
4	12.05	12.01	11.70	11.88	12.22	12.36	11.12	10.46	11.25	11.60	11.89	12.20
5	11.98	11.93	11.69	11.88	12.24	12.36	11.06	10.46	11.27	11.60	11.90	12.16
6	11.92	11.88	11.69	11.89	12.24	12.37	11.07	10.46	11.31	11.59	11.91	12.10
7	11.91	11.87	11.69	11.89	12.25	12.39	11.06	10.48	11.31	11.59	11.92	12.09
8	11.90	11.87	11.72	11.91	12.25	12.36	11.05	10.55	11.32	11.59	11.92	12.09
9	11.89	11.87	11.76	11.92	12.26	12.31	11.01	10.58	11.34	11.58	11.94	12.09
10	11.88	11.86	11.76	11.95	12.26	12.27	10.96	10.65	11.35	11.58	11.96	12.09
11	11.87	11.88	11.76	11.94	12.27	12.23	10.93	10.66	11.40	11.58	11.97	12.09
12	11.84	11.89	11.76	11.96	12.27	12.24	10.83	10.67	11.44	11.59	11.96	12.10
13	11.84	11.89	11.77	12.07	12.28	12.25	10.79	10.67	11.46	11.60	12.00	12.12
14	11.86	11.88	11.77	12.06	12.28	12.21	10.76	10.71	11.47	11.61	12.06	12.12
15	11.87	11.89	11.85	12.05	12.29	12.25	10.65	10.80	11.47	11.61	12.05	12.13
16	11.87	11.89	11.85	12.05	12.29	12.26	10.64	10.85	11.45	11.62	12.06	12.17
17	11.88	11.90	11.84	12.05	12.30	12.25	10.63	10.86	11.47	11.63	12.07	12.17
18	11.89	11.91	11.85	12.05	12.30	12.21	10.58	10.86	11.47	11.72	12.07	12.21
19	11.90	11.92	11.85	12.05	12.31	12.13	10.55	10.86	11.47	11.75	12.07	12.23
20	11.91	11.94	11.86	12.06	12.34	12.07	10.51	10.90	11.47	11.76	12.09	12.23
21	11.92	11.95	11.88	12.06	12.38	11.94	10.50	10.97	11.52	11.76	12.10	12.23
22	11.93	11.95	11.88	12.07	12.44	11.90	10.50	10.98	11.55	11.76	12.10	12.23
23	11.93	11.95	11.88	12.07	12.44	11.90	10.47	11.01	11.56	11.76	12.09	12.24
24	11.93	11.95	11.88	12.08	12.43	11.86	10.46	11.03	11.56	11.78	12.09	12.26
25	11.96	12.05	11.88	12.10	12.40	11.76	10.47	11.04	11.57	11.80	12.10	12.26
26	12.02	11.95	11.88	12.13	12.37	11.72	10.54	11.05	11.58	11.80	12.12	12.24
27	12.06	11.88	11.88	12.16	12.33	11.67	10.56	11.06	11.59	11.83	12.15	12.25
28	12.05	11.77	11.88	12.18	12.33	11.59	10.56	11.09	11.60	11.85	12.17	12.25
29	12.06	11.75	11.88	12.20	12.37	11.53	10.54	11.10	11.60	11.85	12.20	12.26
30	12.09	11.73	11.87	12.21	---	11.51	10.51	11.11	11.60	11.85	12.20	12.26
31	12.09	---	11.87	12.21	---	11.41	---	11.14	---	11.86	12.20	---
MEAN	11.95	11.92	11.81	12.02	12.30	12.08	10.77	10.79	11.44	11.69	12.03	12.18
HIGH	11.84	11.73	11.69	11.87	12.21	11.41	10.46	10.46	11.17	11.58	11.87	12.09
LOW	12.09	12.09	11.88	12.21	12.44	12.39	11.35	11.14	11.60	11.86	12.20	12.26

CAL YR 1979 MEAN 11.37 HIGH 10.20 LOW 12.29
WTR YR 1980 MEAN 11.75 HIGH 10.46 LOW 12.44



BROOME COUNTY

420657075583501. Local number, Bm 121.

LOCATION.--Lat 42°06'57", long 75°58'35", Hydrologic Unit 02050103, at Camden and Main Streets, Johnson City. Owner: U.S. Geological Survey.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 53 ft (16.2 m), cased to 53 ft (16.2 m), open end.

DATUM.--Altitude of land-surface datum is 835 ft (255 m), from topographic map. Measuring point: Top of casing, 3.17 ft (0.966 m) above land-surface datum.

REMARKS.--Well cleaned from 46 ft (14.0 m), to original depth on Oct. 19, 1970. Water level affected by floods of Susquehanna River, and by pumping from municipal well field 1,100 ft (335 m) south. Digital recorder installed Dec. 6, 1978.

PERIOD OF RECORD.--March 1947 to current year.

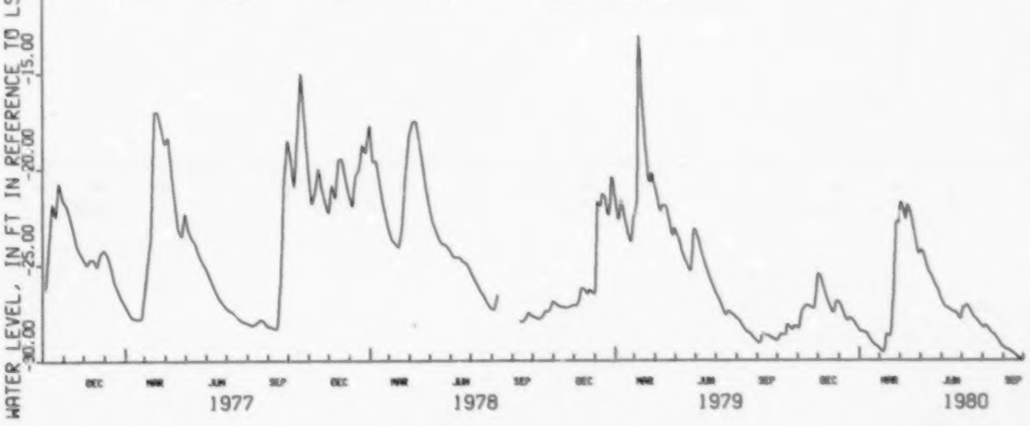
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.73 ft (2.97 m) below land-surface datum, Apr. 8, 1956; lowest, 33.47 ft (10.20 m) below land-surface datum, Sept. 23, 1965.

EXTREMES FOR CURRENT YEAR.--Highest water level, 21.71 ft (6.62 m) below land-surface datum, Apr. 2; lowest 29.94 ft (9.13 m) below land-surface datum, Sept. 26-28.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.92	28.30	25.48	26.95	28.46	29.37	21.92	24.26	26.83	27.57	28.25	29.30
2	28.89	28.35	25.49	27.00	28.49	29.41	21.74	24.25	26.89	27.35	28.30	29.32
3	28.85	28.25	25.55	27.07	28.49	29.46	21.82	24.28	26.96	27.22	28.30	29.36
4	28.80	27.96	25.63	27.15	28.48	29.49	21.96	24.31	27.04	27.20	28.25	29.40
5	28.71	27.68	25.70	27.23	28.49	29.53	22.09	24.38	27.11	27.22	28.20	29.43
6	28.66	27.49	25.81	27.33	28.51	29.57	22.18	24.50	27.17	27.23	28.18	29.43
7	28.65	27.40	25.94	27.43	28.51	29.58	22.30	24.63	27.22	27.17	28.18	29.44
8	28.65	27.34	26.08	27.54	28.53	29.56	22.49	24.75	27.27	27.11	28.25	29.44
9	28.65	27.28	26.19	27.63	28.55	29.34	22.67	24.88	27.26	27.09	28.32	29.45
10	28.65	27.25	26.29	27.71	28.57	29.03	22.36	25.01	27.26	27.14	28.34	29.47
11	28.65	27.21	26.41	27.79	28.56	28.80	21.99	25.13	27.27	27.21	28.38	29.51
12	28.65	27.16	26.53	27.86	28.57	28.68	21.88	25.25	27.29	27.27	28.43	29.54
13	28.65	27.13	26.64	27.90	28.64	28.63	22.01	25.37	27.31	27.32	28.49	29.57
14	28.65	27.12	26.75	27.93	28.72	28.64	22.16	25.45	27.36	27.38	28.55	29.57
15	28.26	27.12	26.84	27.92	28.80	28.71	22.21	25.48	27.40	27.46	28.57	29.60
16	28.12	27.14	26.92	27.85	28.86	28.74	22.25	25.50	27.43	27.54	28.59	29.63
17	28.15	27.14	27.02	27.78	28.91	28.74	22.39	25.58	27.46	27.60	28.60	29.66
18	28.18	27.18	27.12	27.77	28.97	28.64	22.56	25.65	27.45	27.66	28.62	29.71
19	28.22	27.19	27.20	27.79	29.02	28.17	22.76	25.73	27.46	27.72	28.66	29.73
20	28.27	27.22	27.30	27.82	29.07	27.57	22.96	25.82	27.48	27.78	28.71	29.75
21	28.30	27.25	27.40	27.87	29.11	27.11	23.15	25.92	27.50	27.81	28.76	29.78
22	28.34	27.26	27.46	27.92	29.15	26.45	23.34	25.99	27.50	27.85	28.82	29.80
23	28.39	27.28	27.51	27.96	29.19	25.23	23.53	26.07	27.51	27.87	28.87	29.82
24	28.40	27.30	27.52	28.00	29.21	24.09	23.73	26.14	27.55	27.89	28.92	29.87
25	28.33	27.30	27.45	28.05	29.23	23.33	23.92	26.21	27.60	27.94	28.96	29.90
26	28.25	27.17	27.27	28.13	29.25	22.89	24.12	26.27	27.67	27.99	29.01	29.93
27	28.21	26.87	27.06	28.19	29.25	22.74	24.29	26.33	27.75	28.04	29.08	29.94
28	28.19	26.33	26.95	28.23	29.29	22.81	24.44	26.41	27.82	28.07	29.14	29.93
29	28.19	25.82	26.91	28.28	29.33	22.87	24.47	26.52	27.84	28.13	29.22	29.93
30	28.22	25.55	26.91	28.33	---	22.65	24.38	26.64	27.79	28.18	29.27	29.90
31	28.26	---	26.94	28.39	---	22.29	---	26.75	---	28.21	29.30	---
MEAN	28.46	27.23	26.65	27.77	28.83	27.17	22.80	25.47	27.38	27.59	28.63	29.64
HIGH	28.12	25.55	25.48	26.95	28.46	22.29	21.74	24.25	26.83	27.09	28.18	29.30
LOW	28.92	28.35	27.52	28.39	29.33	29.58	24.47	26.75	27.84	28.21	29.30	29.93

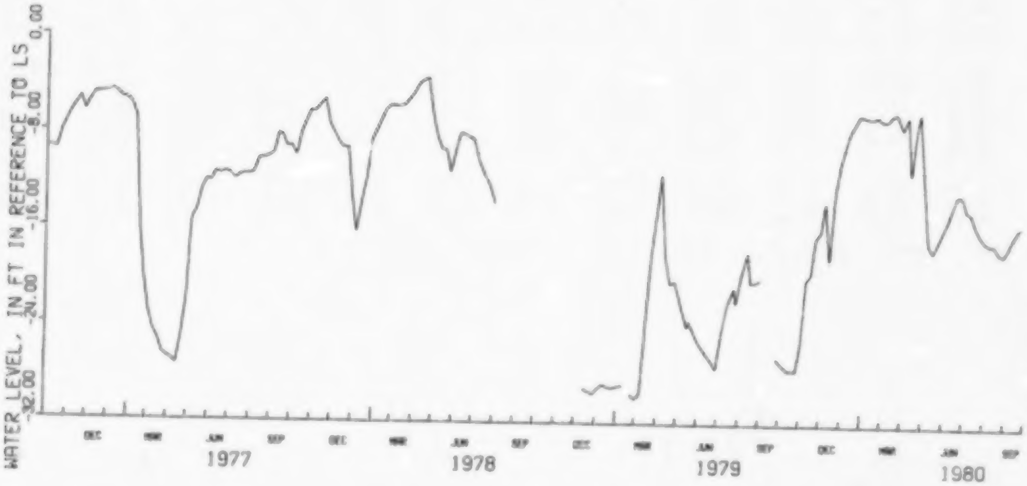
WTR YR 1980 MEAN 27.30 HIGH 21.74 LOW 29.93



420530078445201. Local number, Ct 121.
LOCATION.--Lat 42°05'30", long 78°44'52", Hydrologic Unit 05010001, near Red House.
Owner: State Department of Environmental Conservation.
AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in. (0.15 m), depth 53 ft (16.2 m), cased to 53 ft (16.2 m), open end.
DATUM.--Altitude of land-surface datum is 1,470 ft (448 m), from topographic map. Measuring point: Top of casing, 0.30 ft (0.091 m) above land-surface datum.
REMARKS.--Unusually low water levels experienced since July 4, 1969. (Lowest previous measurement was 13.23 ft or 4.03 m, Feb. 1, 1961). Extreme low levels occur during late summer and fall months, with lower than normal levels prevalent throughout the year. A source of nearby pumping has not been determined.
PERIOD OF RECORD.--September 1950 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 3.29 ft (1.00 m) below land-surface datum, Dec. 15, 1967; lowest measured 34.87 ft (10.62 m) below land-surface datum, Nov. 21, 1972.
EXTREMES FOR CURRENT YEAR.--Highest water level measured, 5.89 ft (1.80 m) below land-surface datum, Apr. 25; lowest measured, 27.50 ft (8.38 m) below land-surface datum, Oct. 26.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1979	26.92	JAN 04, 1980	8.68	APR 07, 1980	6.10	JUL 11, 1980	14.14
15	27.46	11	7.52	12	10.98	18	15.26
19	27.42	21	6.52	20	7.11	25	15.98
26	27.50	25	6.07	25	5.89	AUG 01	16.50
NOV 02	25.38	FEB 01	6.17	MAY 02	11.65	08	16.68
09	19.91	08	6.32	09	16.77	15	16.76
16	19.43	15	6.28	16	17.44	22	17.38
23	16.36	22	6.20	30	15.72	29	17.61
30	15.86	29	6.55	JUN 07	14.64	SEP 05	16.86
DEC 07	13.42	MAR 07	6.46	13	13.68	12	16.13
14	18.22	14	5.95	20	12.68	22	15.21
21	12.65	21	5.91	27	12.69		
28	10.21	30	7.20	JUL 04	13.88		



CAYUGA COUNTY

424158076251901. Local number, Cy 7.

LOCATION.--Lat 42°41'58", long 76°25'19", Hydrologic Unit 04140201, near Moravia.
Owner: Earl Van Pelt.

AQUIFER.--Water-table aquifer in clayey gravel of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 28 ft (8.5 m), cased to 26 ft (7.9 m) 1.25-in. (0.03-m) well point (60-gauze screen 26 ft or 7.9 m to 28 ft or 8.5 m).

DATUM.--Altitude of land-surface datum is 765 ft (233 m), from topographic map. Measuring point: Top of casing, 3.00 ft (0.914 m) above land-surface datum.

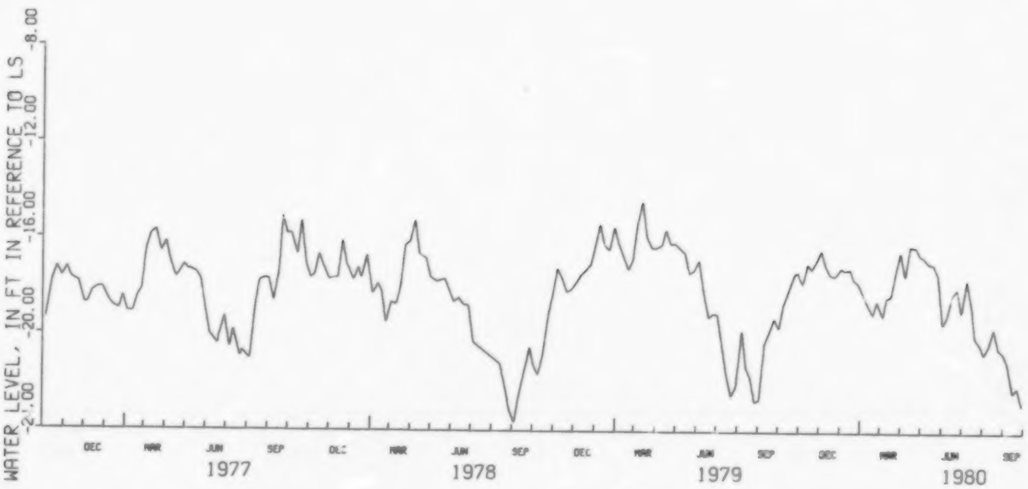
PERIOD OF RECORD.--December 1965 to current year. Unpublished record for December 1965 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.91 ft (3.63 m) below land-surface datum, June 26, 1972; lowest measured, 24.53 ft (7.48 m) below land-surface datum, Oct. 20, 1973.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 16.25 (4.95 m) below land-surface datum, Apr. 14; lowest measured, 22.84 ft (6.96 m) below land-surface datum, Sept. 29.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1979	19.68	JAN 07, 1980	17.26	APR 07, 1980	17.49	JUL 08, 1980	17.64
08	18.72	16	17.21	14	16.25	15	18.73
25	17.41	21	17.63	23	16.30	20	20.04
29	17.34	28	17.80	28	16.62	28	20.36
NOV 05	17.84	FEB 04	18.24	MAY 05	16.73	AUG 03	20.74
13	16.99	11	18.68	12	16.96	10	20.35
19	17.21	19	19.08	19	17.01	17	19.66
27	16.84	25	18.54	26	17.47	24	20.52
DEC 03	16.44	MAR 05	19.17	JUN 02	19.51	31	20.68
10	17.11	10	18.41	09	19.17	SEP 07	21.10
17	17.45	17	18.31	16	18.31	15	22.32
24	17.50	24	17.24	24	18.03	22	22.11
JAN 02, 1980	17.16	31	16.50	30	18.99	29	22.84

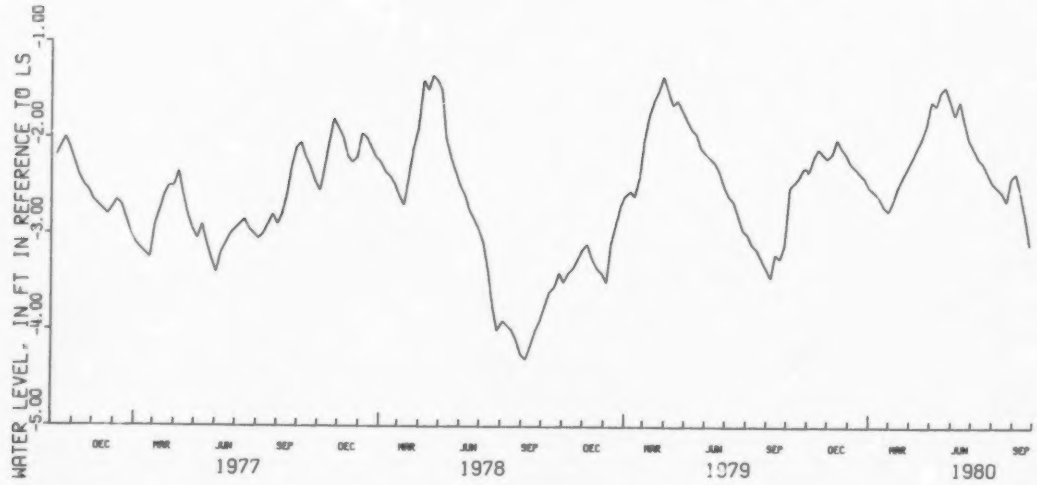


CHAUTAUQUA COUNTY

420326079295801. Local number, Cu 5.
LOCATION.--Lat 42°03'26", long 79°29'58", Hydrologic Unit 05010002, near Panama.
Owner: State Department of Environmental Conservation.
AQUIFER.--Water-table aquifer in till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused well, diameter 36 in. (0.91 m), depth 33 ft (10.1 m), stone-lined.
DATUM.--Altitude of land-surface datum is 1,750 ft (533 m), from topographic map. Measuring point: Top of 0.25-in. (0.006-m) steel-plate well cover, inside shelter door, 0.44 ft (0.134 m) below land-surface datum.
PERIOD OF RECORD.--May 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.95 ft (0.29 m) below land-surface datum, Dec. 26, 1968; lowest measured 9.41 ft (2.87 m) below land-surface datum, May 24, 1949.
EXTREMES FOR CURRENT YEAR.--Highest water level measured, 1.45 ft (0.44 m) below land-surface datum, May 22; lowest, measured 3.10 ft (0.94 m) below land-surface datum, Sept 25.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 1979	2.50	JAN 02, 1980	2.25	APR 10, 1980	2.10	JUL 17, 1980	2.25
11	2.45	09	2.30	17	2.00	24	2.35
18	2.40	16	2.35	24	1.85	31	2.45
25	2.30	23	2.40	MAY 01	1.60	AUG 07	2.50
29	2.30	30	2.50	08	1.65	14	2.55
NOV 01	2.35	FEB 07	2.55	15	1.50	21	2.65
08	2.20	14	2.60	22	1.45	28	2.40
15	2.10	21	2.70	29	1.60	SEP 04	2.35
22	2.15	28	2.75	JUN 05	1.75	11	2.55
29	2.20	MAR 06	2.65	12	1.60	18	2.80
DEC 06	2.15	13	2.50	19	1.80	25	3.10
13	2.00	20	2.40	26	2.00		
20	2.10	27	2.30	JUL 03	2.10		
27	2.15	APR 03	2.20	10	2.20		



CHAUTAUQUA COUNTY

420815079121401. Local number, Cu 10.

LOCATION.--Lat 42°08'15", long 79°12'14", Hydrologic Unit 05010002, at Falconer.
Owner: City of Jamestown.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 12 in. (0.30 m) to 10 in. (0.25 m), depth 232 ft (70.7 m), filled in from original depth of 240 ft (73.2 m), cased 12-in. (0.30 m) 0 ft (0.0 m) to 130 ft (39.6 m) 10 in. (0.25 m) 130 ft (39.6 m) to 240 ft (73.2 m), slotted 130 ft (39.6 m) to 144 ft (43.9 m), open end.

DATUM.--Altitude of land-surface datum is 1,250 ft (381 m), from topographic map. Measuring point: Top of flange, 5.00 ft (1.524 m) above land-surface datum.

REMARKS.--Water level affected by pumping (average 5 Mgal/d or 18,900 m /d in 1977) from municipal well field. Digital recorder installed Dec. 18, 1978.

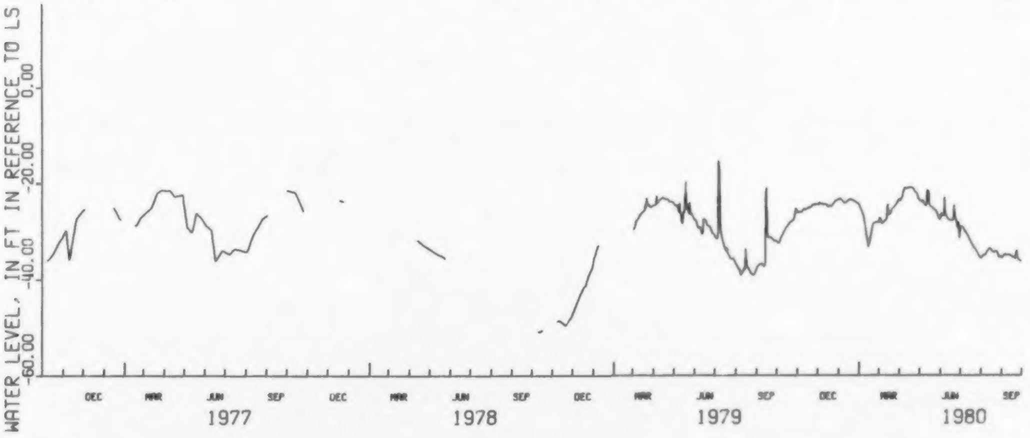
PERIOD OF RECORD.--November 1939 to September 1943, August 1946 to current year. Unpublished record for November 1939 to September 1943, August 1946 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.2 ft (1.6 m) above land-surface datum, Mar. 14, 1942; lowest, 66.6 ft (20.3 m) below land-surface datum, Nov. 3, 1971.

EXTREMES FOR CURRENT YEAR.--Highest water level, 10.62 ft (3.24 m) below land-surface datum, May 15; lowest, 38.52 ft (11.74 m), Aug 28.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.99	26.05	24.36		24.25	28.06	23.21	23.31	27.61	28.99	35.65	35.52
2	32.19	26.02	24.38			28.09	23.19	23.45	26.66	28.87	35.65	35.57
3	32.36	25.97	24.35			27.11	23.69	23.56	26.21	28.94	35.35	35.18
4	32.53	25.93	23.91	23.10		27.43	23.15	23.61	26.19	29.00	35.03	34.90
5	32.54	25.95	24.33			28.11	22.88	23.75	26.69	29.10	34.98	34.80
6	32.03	25.97	24.32			28.34	22.76	23.90	26.57	29.27	34.92	34.78
7	31.44	25.99	24.30			28.36	21.52	23.53	26.76	29.62	34.89	34.73
8	31.12	25.87	24.32		26.87	28.16	21.48	24.06	22.80	29.90	35.04	34.93
9	30.85	25.78	24.32			27.96	20.83	24.33	25.85	30.08	34.58	34.94
10	30.56	25.43	24.48			27.86	20.97	24.45	26.55	30.25	34.22	34.90
11	30.32	25.26	24.35	24.18		27.67	21.14	24.51	26.92	30.48	34.01	34.86
12	30.15	25.41	24.32			27.63	21.14	24.73	27.16	30.68	33.87	34.90
13	29.89	25.53	24.32			27.52	21.08	21.25	27.38	30.91	33.75	34.96
14	29.52	25.46	24.40			26.11	21.00	22.87	27.53	31.20	33.54	35.02
15	29.20	25.35	24.45		33.42	24.29	20.88	21.46	27.65	31.58	33.51	35.13
16	29.01	25.29	24.40			26.34	20.82	24.13	27.71	31.91	33.74	35.20
17	28.93	25.20	24.97			26.62	20.89	24.61	27.72	32.17	33.93	35.26
18	28.74	25.00	24.73	23.25		26.36	20.92	24.75	27.76	32.46	34.19	35.37
19	28.58	25.03	24.68			26.16	20.88	24.81	27.81	32.68	34.33	35.44
20	28.31	25.08	24.74			25.90	20.83	24.94	27.79	32.93	34.36	35.50
21	28.01	25.02	24.86			25.52	20.88	25.11	27.62	33.30	34.26	35.52
22	27.96	24.90			28.34	25.10	20.95	25.25	24.51	33.51	34.25	35.68
23	27.94	24.64		23.46		25.10	21.40	25.33	26.74	33.54	34.16	33.80
24	27.83	24.49		23.63		24.98	21.64	25.47	27.24	33.71	34.09	35.10
25	27.79	24.45		23.72		24.72	21.81	25.56	27.53	34.05	34.29	35.70
26	27.55	24.33				24.59	21.93	25.61	27.77	34.29	34.46	35.93
27	27.28	24.38				24.50	22.00	25.99	29.26	34.54	34.65	36.02
28	26.64	24.38	23.59		28.02	24.26	22.08	26.29	28.24	34.79	[illegible]	36.04
29	26.04	24.40			28.02	23.96	22.74	26.55	28.13	35.06	35.23	36.16
30	25.10	24.39			---	23.69	23.16	27.12	31.51	35.24	35.10	36.30
31	25.96	---			---	23.45	---	27.35	---	35.46	35.27	---
MEAN	29.30	25.23				26.26	21.73	24.57	27.20	31.89	34.54	35.27
MAX	32.54	26.05				28.36	23.69	27.35	31.51	35.46	35.65	36.30
MIN	25.10	24.33				23.45	20.82	21.25	22.80	28.87	33.51	33.80



CHEMUNG COUNTY

420829076484801. Local number, Cm 46.

LOCATION.--Lat 42°08'29", long 76°48'48", Hydrologic Unit 02050105, near Horseheads. Owner: Milton A. Roy.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in. (0.15 m), depth 34 ft (10.4 m), cased to 34 ft (10.4 m), open end.

DATUM.--Altitude of land-surface datum is 880 ft (268 m), from topographic map. Measuring point: Top of extended casing, 3.35 ft (1.021 m) above land-surface datum.

REMARKS.--Water level affected by floods of Newtown Creek.

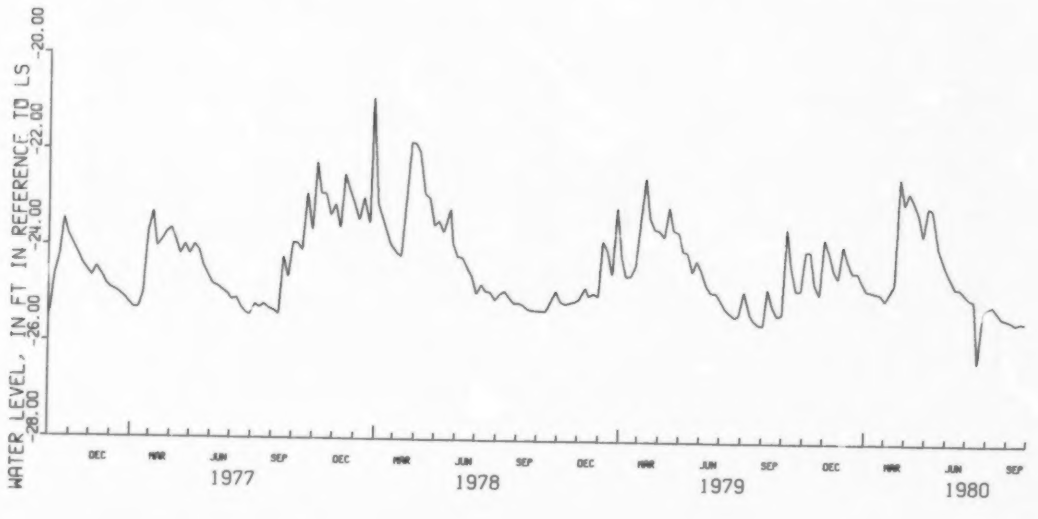
PERIOD OF RECORD.--October 1955 to current year. Unpublished record for October 1955 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.93 ft (5.77 m) below land-surface datum, April 25, 1961; lowest measured, 26.30 ft (8.02 m) below land-surface datum, July 18, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level measured,22.45 ft (6.84 m) below land-surface datum, Mar. 22; lowest measured, 26.30 ft (8.02 m) below land-surface datum, July 18.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1979	23.53	DEC 29, 1979	23.88	APR 12, 1980	22.95	JUL 12, 1980	25.00
13	24.32	JAN 05 1980	24.20	19	23.20	18	26.30
20	24.82	12	24.44	26	23.66	26	25.22
27	24.82	20	24.43	MAY 03	23.06	AUG 02	25.13
NOV 03	24.00	26	24.62	10	23.10	09	25.10
10	24.00	FEB 02	24.80	19	23.90	16	25.23
17	24.70	23	24.88	24	24.09	23	25.35
24	24.90	MAR 01	25.01	31	24.36	30	25.38
DEC 01	23.74	15	24.67	JUN 07	24.55	SEP 06	25.42
08	24.02	22	22.45	14	24.74	13	25.48
15	24.40	29	23.00	21	24.75	19	25.44
22	24.56	APR 05	22.75	JUL 05	24.96	27	25.45

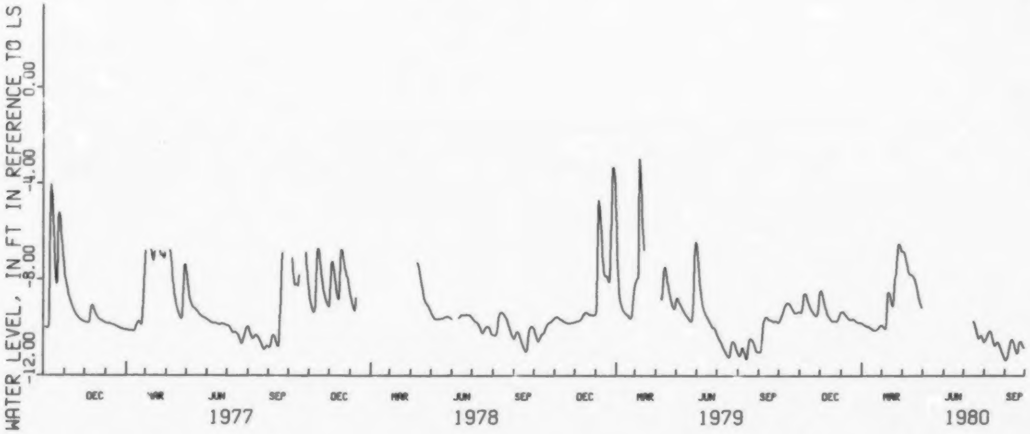


CHENANGO COUNTY

421556075281602. Local number, Cn 12.
LOCATION.--Lat 42°15'56", long 75°28'16", Hydrologic Unit 02050101, near Bainbridge.
Owner: Ilse Maehlman.
AQUIFER.--Water-table aquifer in gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 13 ft (4.0 m), cased to 13 ft (4.0 m) gravel-packed, open end.
DATUM.--Altitude of land-surface datum is 980 ft (299 m), from topographic map. Measuring point: File mark at top of flange, 1.33 ft (0.405 m) above land-surface datum.
REMARKS.--This well drilled April 1974 as a replacement for 421556075281601 (local number Cn 11), located 90 ft (27.4 m) north, which has a period of record from October 1965 to September 1972 (unpublished).
PERIOD OF RECORD.--April 1975 to current year. Unpublished record for April 1975 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.79 ft (0.85 m) below land-surface datum, Mar. 7, 1979; lowest, 11.38 ft (3.47 m) below land-surface datum, Sept. 3, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 6.48 ft (1.98 m) below land-surface datum, Mar. 26-27; lowest, 11.38 ft (3.47 m) below land-surface datum, Sept. 3.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.78	9.35	8.46	9.34	9.82	9.90	6.84	9.17			10.63	11.30
2	9.73	9.37	8.45	9.33	9.84	9.91	6.82	9.13			10.60	11.36
3	9.67	9.38	8.51	9.33	9.86	9.94	6.85				10.53	11.37
4	9.59	9.26	8.62	9.35	9.89	9.98	6.92				10.47	11.32
5	9.50	8.96	8.75	9.39	9.90	10.03	7.04				10.40	11.21
6	9.42	8.71	8.88	9.43	9.92	10.07	7.17				10.32	11.08
7	9.32	8.59	9.01	9.46	9.93	10.07	7.31				10.24	10.95
8	9.22	8.56	9.12	9.50	9.94	9.61	7.44				10.18	10.83
9	9.14	8.59	9.22	9.52	9.94	8.73	7.57				10.14	10.65
10	9.08	8.65	9.30	9.56	9.95	8.53	7.71				10.14	10.54
11	9.03	8.74	9.40	9.60	9.96	8.53	7.78				10.18	10.49
12	8.99	8.84	9.47	9.63	9.98	8.57	7.80				10.26	10.49
13	8.97	8.95	9.53	9.65	10.01	8.65	7.79				10.38	10.54
14	8.97	9.03	9.57	9.68	10.03	8.77	7.79				10.51	10.62
15	8.98	9.10	9.61	9.69	10.06	8.90	7.83			9.72	10.62	10.71
16	9.01	9.16	9.65	9.68	10.07	9.02	7.86			9.75	10.71	10.82
17	9.05	9.22	9.68	9.66	10.09	9.12	7.91			9.80	10.77	10.92
18	9.09	9.26	9.72	9.65	10.11	9.02	7.95			9.87	10.75	11.00
19	9.14	9.32	9.73	9.65	10.12	8.35	8.01			9.99	10.67	11.07
20	9.20	9.37	9.74	9.67	10.11	8.03	8.10			10.09	10.60	11.09
21	9.24	9.41	9.74	9.69	10.11	7.89	8.21			10.21	10.58	10.97
22	9.30	9.44	9.73	9.72	10.11	7.71	8.34			10.33	10.61	10.71
23	9.35	9.48	9.73	9.75	10.09	7.33	8.47			10.43	10.67	10.59
24	9.39	9.51	9.73	9.76	10.06	6.81	8.61			10.47	10.75	10.56
25	9.41	9.53	9.75	9.78	10.03	6.59	8.75			10.42	10.83	10.58
26	9.41	9.53	9.74	9.80	9.98	6.49	8.87			10.36	10.91	10.63
27	9.39	9.48	9.69	9.80	9.93	6.50	8.99			10.32	10.97	10.70
28	9.36	9.14	9.60	9.79	9.91	6.57	9.09			10.33	11.05	10.79
29	9.35	8.77	9.50	9.79	9.89	6.69	9.16			10.38	11.12	10.84
30	9.34	8.54	9.42	9.80	---	6.79	9.19			10.47	11.18	10.84
31	9.34	---	9.36	9.81	---	6.84	---			10.57	11.24	---
MEAN	9.28	9.11	9.37	9.62	9.99	8.39	7.94				10.61	10.85
HIGH	8.97	8.54	8.45	9.33	9.82	6.49	6.82				10.14	10.49
LOW	9.78	9.53	9.75	9.81	10.12	10.07	9.19				11.24	11.37



CORTLAND COUNTY

423541076114701. Local number, C 102.

LOCATION.--Lat 42°35'41", long 76°11'47", Hydrologic Unit 02050102, at Municipal Water Works, Cortland. Owner: City of Cortland.

AQUIFER.--Water-table aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driven unused well, diameter 1.25 in. (0.03 m), depth 45 ft (13.7 m), 1.25 in. (0.03 m) well point.

DATUM.--Altitude of land-surface datum is 1,140 ft (347 m), from topographic map. Measuring point: Top of coupling, 2.00 ft (0.610 m) above land-surface datum.

REMARKS.--Water level may be affected by pumping from nearby municipal supply wells. This well is a replacement for 423539076114801 (local number C 19), located 80 ft (24.4 m) southwest, which has a period of record from February 1947 to May 1976.

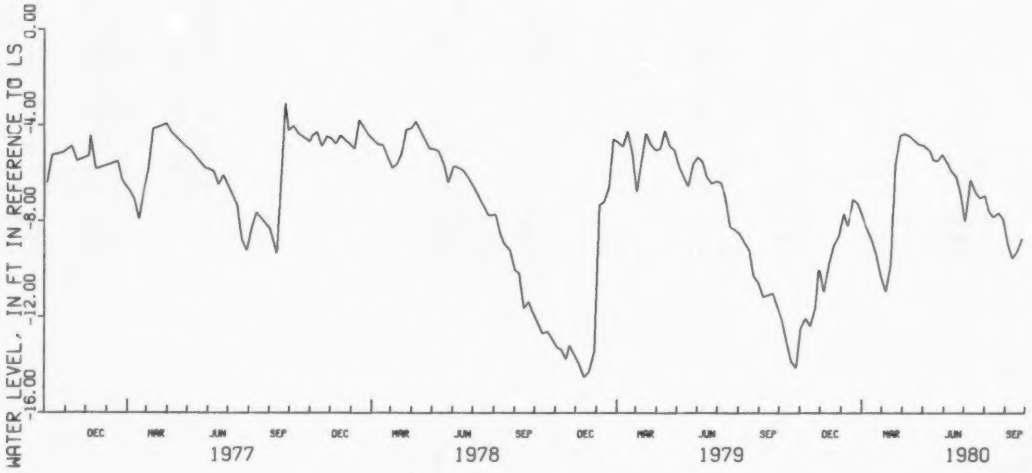
PERIOD OF RECORD.--October 1975 to current year. Unpublished record for October 1975 to September 1977 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.07 ft (0.94 m) below land-surface datum, September 25, 1977;lowest measured, 14.50 ft (4.42 m) below land-surface datum, Dec. 14, 1978.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.33 ft (1.32 m) below land-surface datum, Apr. 4; lowest measured, 14.12 ft (4.30 m) below land-surface datum, Oct. 26.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1979	12.13	DEC 28, 1979	8.63	MAR 28, 1980	4.40	JUL 03, 1980	8.00
12	13.01	JAN 04 1980	7.69	APR 04	4.33	11	6.23
19	13.87	11	8.20	11	4.44	18	6.78
26	14.12	18	7.08	25	4.80	25	7.04
NOV 02	12.44	25	7.25	MAY 02	4.82	AUG 01	6.91
09	12.06	FEB 01	7.75	12	5.08	07	7.56
16	12.39	07	8.25	16	5.43	14	7.82
23	11.62	15	8.75	23	5.48	22	7.64
28	10.02	22	9.39	30	5.20	29	7.92
30	10.09	29	10.31	JUN 06	5.53	SEP 05	9.00
DEC 06	10.95	MAR 07	10.92	13	5.92	12	9.54
14	9.77	14	9.81	20	6.17	19	9.26
21	8.98	21	5.62	26	6.81	26	8.72



GENESEE COUNTY

425516078032001. Local number, Gs 2.

LOCATION.--Lat 42°55'16", long 78°03'20", Hydrologic Unit 04130003, near Pavilion.
Owner: Angeline C. Rigoni.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in. (0.91 m), depth 21 ft (6.4 m), stone-lined.

DATUM.--Altitude of land-surface datum is 1,030 ft (314 m), from topographic map. Measuring point: Painted arrow on top edge of concrete well cover, inside shelter door, 1.12 ft (0.341 m) above land-surface datum.

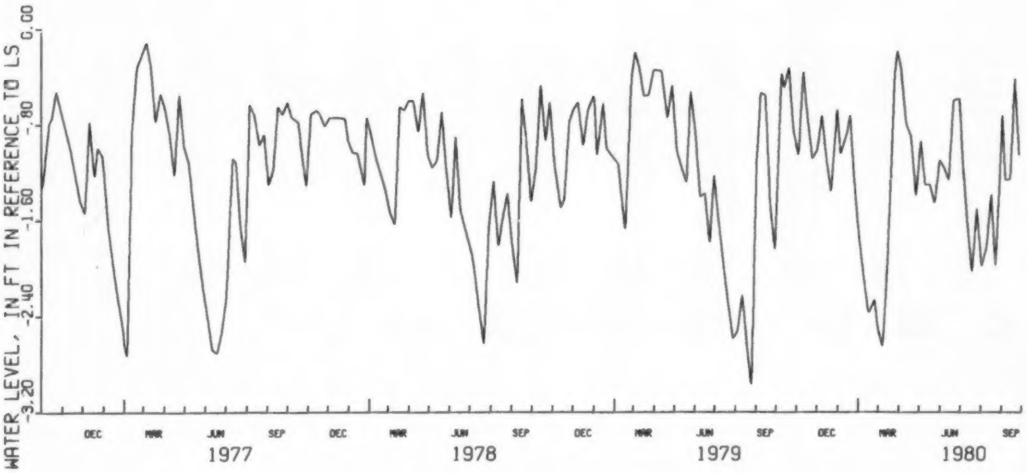
PERIOD OF RECORD.--September 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.10 ft (0.03 m) below land-surface datum, May 14, 1960, Feb. 28, 1971, and Feb. 13, 1976; lowest measured 6.55 ft (2.00 m) below land-surface datum, Feb. 11, 1961.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 0.18 ft (0.06 m) below land-surface datum, Mar. 29; lowest measured,2.65 ft (0.81 m) below land-surface datum, Mar. 8.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08, 1979	0.51	JAN 05, 1980	1.04	APR 04, 1980	0.33	JUL 12, 1980	1.64
09	0.37	14	0.87	12	0.79	19	2.02
13	0.49	19	0.72	19	0.90	26	1.50
20	0.32	26	1.27	26	1.39	AUG 02	1.98
27	0.86	FEB 02	1.73	MAY 03	0.93	09	1.82
NOV 03	1.05	09	2.08	10	1.30	16	1.38
10	0.36	15	2.34	17	1.30	23	1.97
17	0.73	16	2.37	24	1.45	SEP 02	0.72
24	1.08	25	2.26	31	1.09	06	1.26
DEC 01	1.01	MAR 01	2.50	JUN 07	1.16	13	1.25
08	0.72	08	2.65	14	1.26	20	0.41
15	1.09	15	1.93	21	0.59	27	1.05
22	1.35	26	0.36	30	0.58		
31	0.67	29	0.18	JUL 05	1.13		



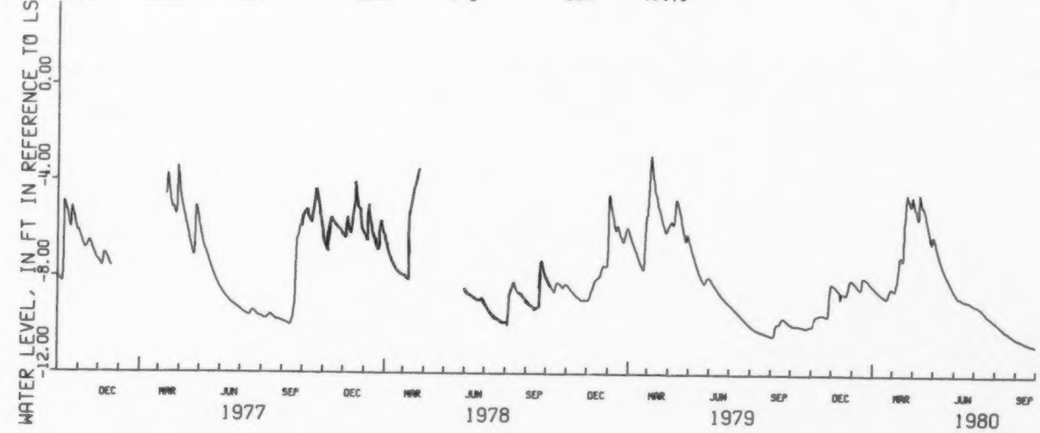
MADISON COUNTY

430056075354102. Local number, M 178.
LOCATION.--Lat 43°00'56", long 75°35'41", Hydrologic Unit 04140202, at Valley Mills.
Owner: Donald L. Greene.
AQUIFER.--Water-table aquifer in Gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 16 ft (4.9 m), cased to 16 ft (4.9 m), open end.
DATUM.--Altitude of land-surface datum is 575 ft (175 m), from topographic map. Measuring point: Top of flange, 3.06 ft (0.933 m) above land-surface datum.
REMARKS.--This well drilled April 1974 as a replacement for 430056075354101 (local number M 177), located 10 ft (3.0 m) west, which has a period of record from October 1965 to September 1973 (unpublished).
PERIOD OF RECORD.--April 1975 to current year. Unpublished record for April 1975 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.60 ft (0.79 m) below land-surface datum, Mar. 5, 1979; lowest, 10.75 ft (3.28 m) below land-surface datum, Sept. 30, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 4.36 ft (1.33 m) below land-surface datum, Apr. 10; lowest, 10.75 ft (3.28 m) below land-surface datum, Sept. 30.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.90	9.99	8.20	8.07	8.34	8.43	4.77	6.22	8.52	9.06	9.75	10.42
2	9.92	9.99	8.23	8.10	8.37	8.44	4.91	6.33	8.56	9.07	9.78	10.44
3	9.94	9.90	8.26	8.15	8.40	8.46	5.06	6.43	8.61	9.08	9.80	10.45
4	9.95	9.77	8.28	8.19	8.43	8.49	5.10	6.54	8.65	9.09	9.82	10.46
5	9.97	9.67	8.30	8.20	8.46	8.47	5.12	6.63	8.69	9.09	9.85	10.47
6	9.97	9.61	8.33	8.25	8.48	8.21	5.25	6.75	8.73	9.11	9.87	10.48
7	9.96	9.57	8.37	8.26	8.51	8.16	5.38	6.86	8.76	9.13	9.90	10.49
8	9.95	9.56	8.41	8.32	8.54	8.00	5.51	6.96	8.76	9.14	9.92	10.50
9	9.96	9.54	8.45	8.36	8.56	7.68	5.33	7.06	8.76	9.16	9.95	10.51
10	9.96	9.53	8.47	8.39	8.58	7.48	4.43	7.16	8.76	9.18	9.97	10.53
11	9.95	9.52	8.49	8.40	8.60	7.15	4.61	7.24	8.78	9.21	10.00	10.54
12	9.96	9.51	8.52	8.43	8.63	7.09	4.77	7.33	8.80	9.23	10.03	10.55
13	9.97	9.51	8.55	8.47	8.66	7.07	4.90	7.40	8.82	9.26	10.05	10.57
14	9.98	9.51	8.86	8.38	8.68	7.08	5.01	7.48	8.84	9.29	10.07	10.58
15	9.98	9.50	8.60	8.05	8.70	7.18	4.95	7.55	8.86	9.32	10.10	10.60
16	9.99	9.51	8.60	7.97	8.70	7.24	5.01	7.62	8.87	9.35	10.12	10.61
17	10.00	9.50	8.61	7.94	8.73	7.02	5.11	7.69	8.88	9.38	10.14	10.62
18	10.01	9.50	8.62	7.94	8.76	5.72	5.22	7.74	8.88	9.42	10.15	10.63
19	10.01	9.51	8.63	7.96	8.77	5.53	5.36	7.80	8.89	9.45	10.17	10.64
20	10.02	9.51	8.65	7.98	8.78	5.22	5.50	7.86	8.90	9.48	10.19	10.65
21	10.03	9.53	8.65	8.00	8.80	4.86	5.63	7.91	8.91	9.51	10.21	10.66
22	10.04	9.54	8.66	8.02	8.77	4.44	5.77	7.97	8.91	9.54	10.23	10.67
23	10.05	9.55	8.64	8.04	8.70	4.57	5.90	8.02	8.92	9.55	10.24	10.68
24	10.05	9.56	8.55	8.08	8.58	4.70	6.04	8.08	8.93	9.57	10.26	10.69
25	10.03	9.56	8.42	8.12	8.50	4.68	6.17	8.13	8.95	9.59	10.28	10.70
26	10.02	9.48	8.28	8.17	8.44	4.72	6.31	8.19	8.96	9.61	10.30	10.71
27	10.01	8.88	8.14	8.21	8.39	4.85	6.43	8.25	8.98	9.64	10.32	10.71
28	10.00	8.42	8.07	8.23	8.38	4.96	6.52	8.31	9.01	9.66	10.34	10.73
29	9.99	8.25	8.04	8.26	8.40	4.90	6.31	8.36	9.02	9.68	10.36	10.74
30	9.99	8.20	8.02	8.29	---	4.53	6.19	8.42	9.04	9.70	10.38	10.75
31	9.99	---	8.05	8.31	---	4.61	---	8.47	---	9.73	10.40	---
MEAN	9.99	9.44	8.42	8.18	8.57	6.45	5.42	7.51	8.83	9.36	10.10	10.59
HIGH	9.90	8.20	8.02	7.94	8.34	4.44	4.43	6.22	8.52	9.06	9.75	10.42
LOW	10.05	9.99	8.86	8.47	8.80	8.49	6.52	8.47	9.04	9.73	[illegible].40	10.75

CAL YR 1979 MEAN 8.07 HIGH 2.87 LOW 10.40
WTR YR 1980 MEAN 8.57 HIGH 4.43 LOW 10.75



GROUND-WATER LEVELS

NIAGARA COUNTY

430655079022001. Local number, Ni 69.

LOCATION.--Lat 43°06'55", long 79°02'20", Hydrologic Unit 04120104, 20th Street and Beech Avenue, Niagara Falls. Owner: City of Niagara Falls.

AQUIFER.--Confined and water-table aquifer in Lockport Dolomite of Middle Silurian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in. (0.20 m) to 6 in. (0.15 m), depth 36 ft (11.0 m), cased 8-in. (0.20-m) 0 ft (0.0 m) to 17 ft (5.2 m), open hole 6-in. (0.15-m) 17 ft (5.2 m) to 36 ft (11.0 m).

DATUM.--Land-surface datum is 596.21 ft (181.725 m) U.S. Lake Survey datum (levels by Uhl, Hall, and Rich). Measuring point: Top of 2-in. (0.05 m) opening in 6 in. (0.15 m) plug of 8 in. (0.20 m) extended casing, 3.60 ft (1.097 m) above land-datum.

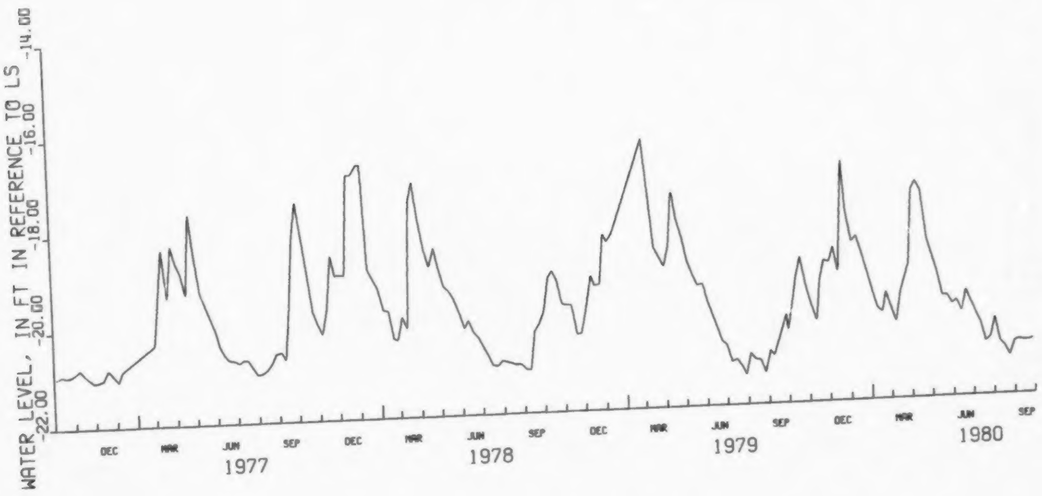
PERIOD OF RECORD.--October 1958 to current year. Unpublished record for October 1958 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.39 ft (5.00 m) below land-surface datum, Mar.5, 1979; lowest measured, 22.21 ft (6.77 m) below land-surface datum, Aug. 3, 1959.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 17.00 ft (5.18 m) below land-surface datum, Dec. 26; lowest measured, 21.20 ft (6.46 m) below land-surface datum, Aug 25.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1979	20.48	DEC 31, 1979	18.10	APR 07, 1980	17.67	JUL 21, 1980	20.89
09	19.86	JAN 07 1980	18.70	14	17.49	28	20.80
15	19.38	14	18.59	21	17.70	AUG 04	20.40
22	18.98	21	18.90	28	18.70	11	20.90
29	19.56	28	19.30	MAY 12	19.40	18	21.00
NOV 05	19.97	FEB 04	19.70	19	19.90	25	21.20
13	20.31	12	20.10	26	19.90	SEP 02	20.90
19	19.49	19	20.19	JUN 02	20.08	08	20.87
26	19.07	25	19.78	09	20.00	15	20.90
DEC 04	19.10	MAR 03	20.10	16	20.24	22	20.90
10	18.80	10	20.40	23	19.80	29	20.87
17	19.30	17	19.79	JUL 07	20.30		
26	17.00	31	19.20	14	20.49		



NIAGARA COUNTY

431308078544501. Local number, Ni 70.

LOCATION.--Lat 43°13'08", long 78°54'45", Hydrologic Unit 04130001, near Ransomville.
Owner: Calvin C. Schultz.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 4 ft (1.2 m) to 5 ft (1.5 m) (reported), stone-lined, depth 24 ft (7.3 m).

DATUM.--Altitude of land-surface datum is 335 ft (102 m), from topographic map. Measuring point: Top of 1-in. (0.02 m) hole in steel cover, at land-surface datum.

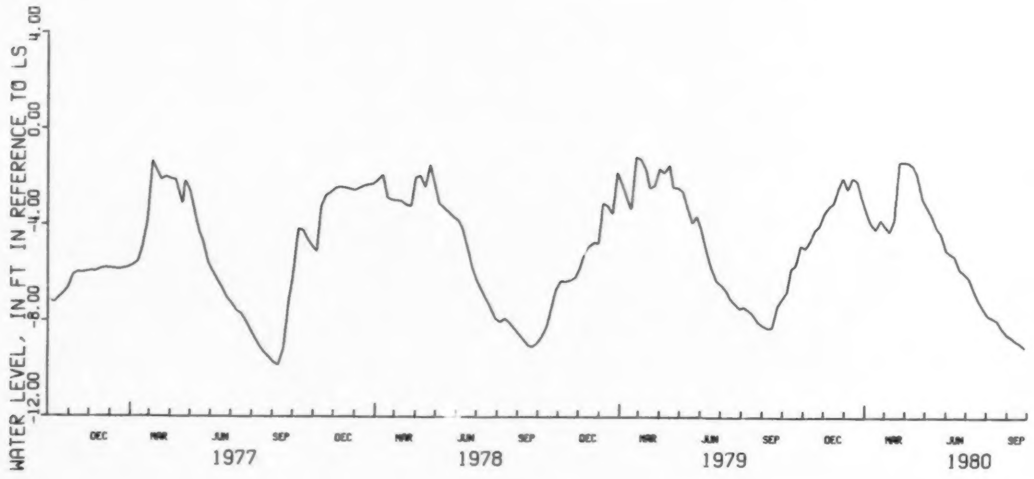
PERIOD OF RECORD.--August 1972 to current year. Unpublished record for August 1972 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.14 ft (0.35 m) below land-surface datum, Feb. 24, 1979; lowest measured, 9.91 ft (3.02 m) below land-surface datum, Nov. 9, 1974.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 1.35 ft (0.41 m) below land-surface datum, Mar. 22; lowest measured, 9.09 ft (2.77 m) below land-surface datum, Sept. 27.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1979	6.79	JAN 12, 1980	2.01	APR 17, 1980	1.80	JUL 19, 1980	7.11
13	5.81	19	2.15	19	2.04	26	7.45
20	5.64	26	2.81	26	2.90	AUG 02	7.74
27	4.84	FEB 03	3.53	MAY 03	3.25	09	7.85
NOV 03	4.96	09	3.94	10	3.57	16	7.97
10	4.64	16	4.18	17	4.07	23	8.27
17	4.19	23	3.75	24	4.33	30	8.50
24	3.99	MAR 01	4.02	JUN 01	5.05	SEP 06	8.64
DEC 01	3.48	08	4.25	07	5.19	13	8.81
08	3.22	15	3.75	14	5.30	20	8.93
15	3.03	22	1.35	21	5.82	27	9.09
22	2.45	29	1.36	28	6.01		
29	2.01	APR 05	1.38	JUL 05	6.20		
JAN 05, 1980	2.50	12	1.53	12	6.71		



ONTARIO COUNTY

425840077133901. Local number, Ot 900.

LOCATION.--Lat 42°58'40", long 77°13'39", Hydrologic Unit 04140201, at New York State Thruway Interchange 43, near Manchester.

Owner: New York State Thruway Authority.

AQUIFER.--Confined aquifer in Camillus Shale of the Salina Group of Late Silurian age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in. (0.15 m), depth 139 ft (42.4 m), cased to 11 ft (3.4 m), open hole.

DATUM.--Altitude of land-surface datum is 555 ft (169 m), from topographic map. Measuring point: Top of casing, 11.43 ft (3.484 m) above land-surface datum.

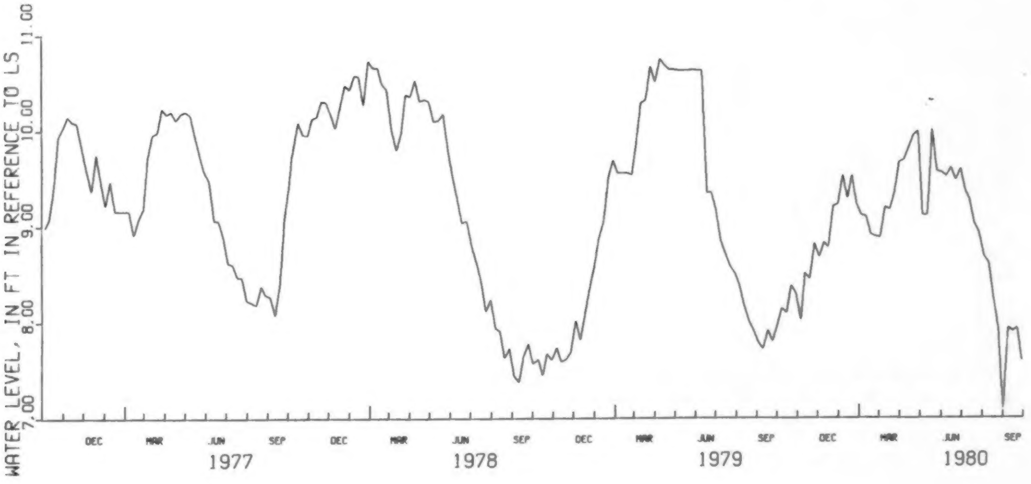
PERIOD OF RECORD.--May 1955 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 11.14 ft (3.40 m) above land-surface datum, Mar. 15, 1976; lowest measured 4.59 ft (1.40 m) above land-surface datum, Nov. 11, 1957.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 10.01 ft (3.05 m) above land-surface datum, May 19; lowest measured, 7.09 ft (2.16 m) above land-surface datum, Sept. 1.

WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1979	7.97	JAN 07, 1980	9.53	APR 14, 1980	9.82	JUL 21, 1980	9.02
08	8.14	14	9.29	21	9.95	28	8.92
15	8.09	21	9.53	28	9.99	AUG 04	8.68
22	8.38	28	9.23	MAY 05	9.11	11	8.61
29	8.30	FEB 04	9.11	12	9.11	18	8.26
NOV 05	8.02	11	9.10	19	10.01	25	7.93
12	8.51	18	8.91	26	9.57	SEP 01	7.09
19	8.45	25	8.89	JUN 02	9.56	08	7.94
26	8.82	MAR 03	8.88	09	9.52	15	7.90
DEC 03	8.68	10	9.20	16	9.61	22	7.94
10	8.83	17	9.17	23	9.48	29	7.60
17	8.78	24	9.36	30	9.60		
24	9.21	31	9.67	JUL 07	9.37		
31	9.23	APR 07	9.69	14	9.27		



OTSEGO COUNTY

424136075025101. Local number, Og 23.

LOCATION.--Lat 42°41'36", long 75°02'51", Hydrologic Unit 02050101, near Hartwick.
Owner: Michael Kallan.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in. (0.91 m), depth 15 ft (4.6 m), stone-lined.

DATUM.--Altitude of land-surface datum is 1,430 ft (435 m), from topographic map. Measuring point: Top edge of hole drilled through concrete well cover, at land-surface datum.

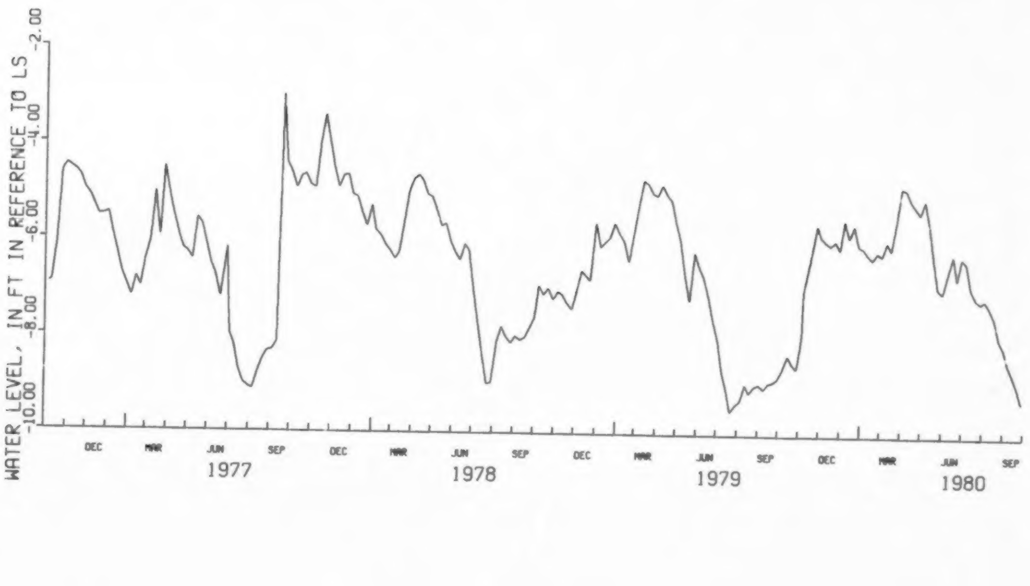
PERIOD OF RECORD.--May 1953 to current year. Records for May 1953 to September 1976 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.98 ft (0.91 m) below land-surface datum, Apr. 2, 1960, Sept. 19, 1977; lowest measured, 12.66 ft (3.86 m) below land-surface datum, Nov. 14, 1964.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.80 ft (1.46 m) below land-surface datum, Mar. 30; lowest measured, 9.25 ft (2.82 m) below land-surface datum, Sept. 28.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1979	8.59	JAN 06, 1980	5.50	APR 06, 1980	4.84	JUL 06, 1980	6.36
14	8.32	13	5.85	13	5.08	13	6.90
21	8.50	20	5.60	20	5.20	20	7.10
28	8.60	27	6.02	27	5.34	27	7.18
NOV 04	7.94	FEB 03	6.07	MAY 04	5.06	AUG 03	7.12
07	6.98	10	6.20	11	5.56	10	7.28
18	6.20	17	6.30	18	6.30	17	7.50
26	5.60	24	6.15	25	6.89	24	7.94
DEC 02	5.84	MAR 02	6.22	JUN 01	6.99	31	8.14
09	5.94	09	5.94	08	6.60	SEP 07	8.45
16	6.02	16	6.10	16	6.20	14	8.67
23	5.92	23	5.52	22	6.70	21	8.92
30	6.10	30	4.80	29	6.25	28	9.25



STEUBEN COUNTY

423121077281201. Local number, Sb 471.

LOCATION.--Lat 42°31'21", long 77°28'12", Hydrologic Unit 02050105, near Cohocton.
Owner: Myron Crouch.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 24 ft (7.3 m), filled in from original depth of 25 ft (7.6 m), cased to 24 ft (7.3 m), 1.25-in. (0.03 m) well point (60-gauze screen 24 ft or 7.3 m to 25 ft or 7.6 m, damaged during well installation).

DATUM.--Altitude of land-surface datum is 1,315 ft (401 m), from topographic map. Measuring point: Top of casing, 3.10 ft (0.945 m) above land-surface datum.

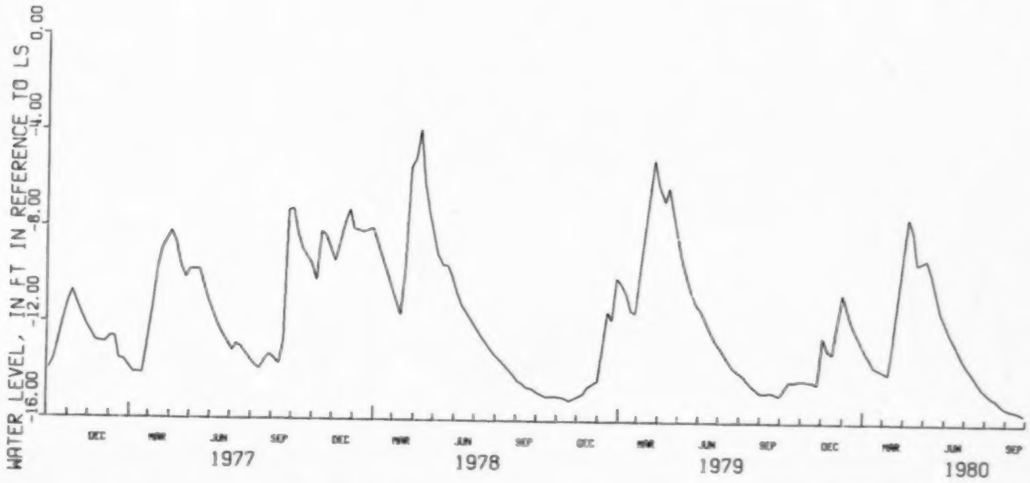
PERIOD OF RECORD.--October 1965 to current year. Unpublished record for October 1965 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.46 ft (0.14 m) below land-surface datum, June 26, 1972; lowest measured, 17.50 ft (5.33 m) below land-surface datum, Oct. 28, 1965.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 7.43 ft (2.26 m) below land-surface datum, Apr. 6; lowest measured, 15.57 ft (4.75 m) below land-surface datum, Sept. 28.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1979	14.29	JAN 13, 1980	11.79	MAY 04, 1980	9.16	JUL 27, 1980	14.50
21	14.30	20	12.24	12	9.85	AUG 03	14.67
28	14.25	27	12.64	18	10.58	10	14.84
NOV 04	14.25	FEB 03	13.05	25	11.35	17	14.95
11	14.27	10	13.30	JUN 01	11.80	22	15.09
18	14.31	17	13.67	08	12.28	29	15.26
25	14.39	24	13.74	15	12.64	SEP 07	15.36
DEC 02	12.45	MAR 09	13.94	22	13.05	14	15.41
09	12.95	APR 06	7.43	29	13.37	21	15.46
16	13.12	13	8.00	JUL 06	13.66	28	15.57
31	10.62	20	9.37	13	13.93		
JAN 06, 1980	11.16	27	9.27	20	14.23		



STEUBEN COUNTY

422445077203301. Local number, Sb 472.

LOCATION.--Lat 42°24'45", long 77°20'33", Hydrologic Unit 02050105, near Kanona.
Owner: David Owens.

AQUIFER.--Water-table aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 17 ft (5.2 m), filled in from original depth of 18 ft (5.5 m), cased to 16 ft (4.9 m), 1.25 in. (0.03 m) well point (60-gauze screen 16 ft or 4.9 m to 18 ft or 5.5 m, damaged during well installation).

DATUM.--Altitude of land-surface datum is 1,220 ft (372 m), from topographic map. Measuring point: Top of casing, 3.00 ft (0.914 m) above land-surface datum.

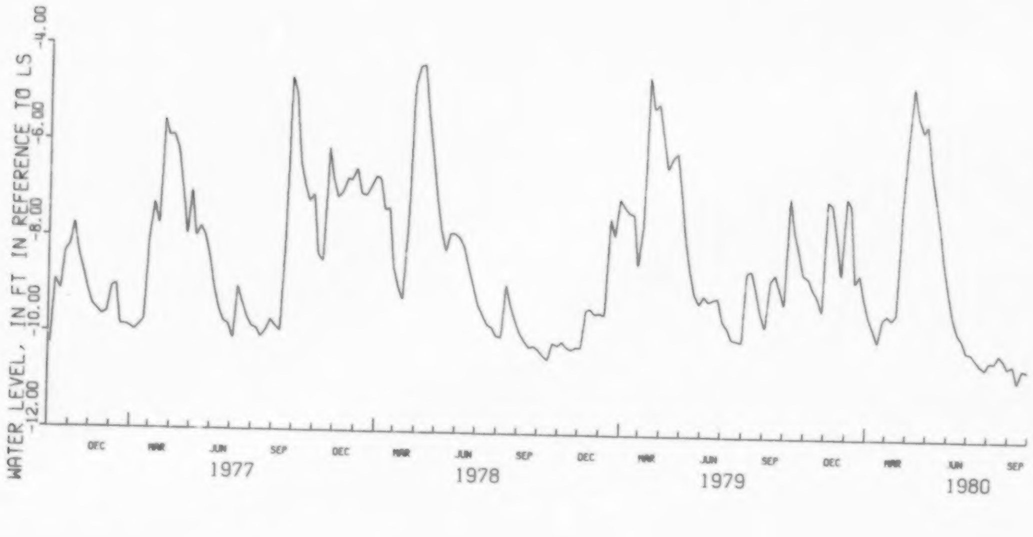
PERIOD OF RECORD.--November 1965 to current year. Unpublished record for November 1965 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.64 ft (1.11 m) below land-surface datum, June 25, 1972; lowest measured, 10.84 ft (3.30 m) below land-surface datum, Sept. 22, 1966.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.66 ft (1.42 m) below land-surface datum, Apr. 6; lowest measured, 10.77 ft (3.28 m) below land-surface datum, Sept. 14.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1979	7.00	JAN 06, 1980	7.14	APR 06, 1980	4.66	JUL 06, 1980	10.17
14	7.71	13	8.75	13	5.27	13	10.30
21	8.15	20	8.58	21	5.59	20	10.42
28	8.59	27	9.09	27	5.44	27	10.50
NOV 05	8.68	FEB 03	9.48	MAY 05	6.44	AUG 03	10.34
11	8.90	10	9.71	12	7.03	10	10.36
18	9.06	17	9.98	18	7.59	17	10.19
25	9.36	24	9.50	25	8.30	24	10.30
DEC 02	7.05	MAR 02	9.41	JUN 01	8.90	30	10.47
09	7.14	09	9.51	08	9.43	SEP 07	10.40
16	7.80	16	9.38	15	9.77	14	10.77
23	8.60	23	7.10	22	9.90	21	10.49
30	6.99	29	5.87	29	10.16	29	10.53

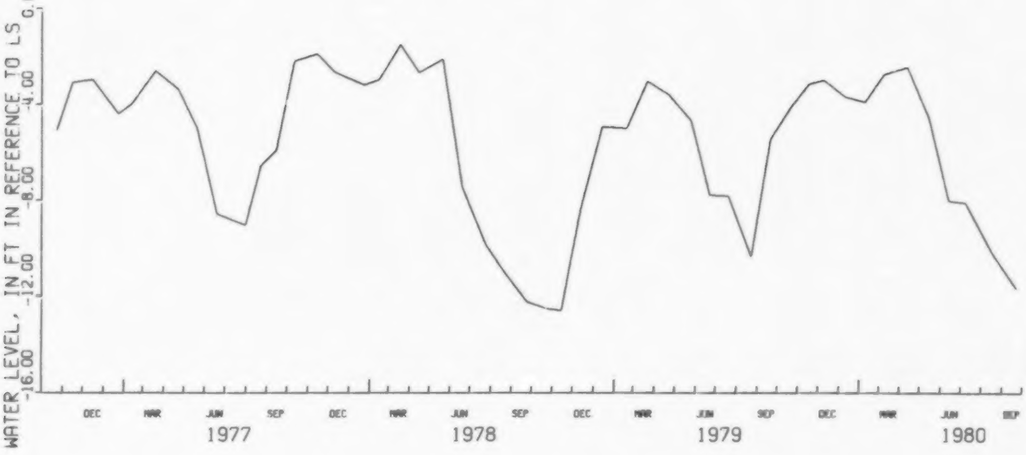


WYOMING COUNTY

423739077595501. Local number, Wo 1.
LOCATION.--Lat 42°37'39", long 77°59'55", Hydrologic Unit 04130002, Letchworth State Park, near Castile.
Owner: New York State Department of Environmental Conservation.
AQUIFER.--Water-table aquifer in till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused well, diameter 2 in. (0.05 m), depth 14 ft (4.3 m), well point (60-gauze screen 12 ft or 3.7 m to 14 ft or 4.3 m).
DATUM.--Altitude of land-surface datum is 1,020 ft (311 m), from topographic map. Measuring point: Top of 2-in. (0.05 m) by 1-in. (0.02 m) reducing coupling, 3.33 ft (1.015 m) above land-surface datum.
PERIOD OF RECORD.--November 1942 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.5 ft (0.15 m) below land-surface datum, Apr. 5, 1947; lowest measured, dry, Dec. 6-27, 1964, Jan. 2, 1965.
EXTREMES FOR CURRENT YEAR.--Highest water level measured, 2.42 ft (0.74 m) below land-surface datum, Apr. 12; lowest measured, 11.65 ft (3.55 m) below land-surface datum, Sept. 22.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21, 1979	4.05	JAN 10, 1980	3.66	APR 12, 1980	2.42	JUL 08, 1980	8.08
NOV 17	3.12	FEB 08	3.88	MAY 14	4.51	AUG 17	10.17
DEC 09	2.96	MAR 08	2.72	JUN 13	8.00	SEP 22	11.65



WYOMING COUNTY

423743078070802. Local number, Wo 4.

LOCATION.--Lat 42°37'43", long 78°07'08", Hydrologic Unit 04130002, near Gainesville.
Owner: Letchworth Central School.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 20 ft (6.1 m), cased to 20 ft (6.1 m), open end.

DATUM.--Altitude of land-surface datum is 1,610 ft (491 m), from topographic map. Measuring point: Top of casing, 2.60 ft (0.792 m) above land-surface datum.

REMARKS.--This well drilled May 1974 as a replacement for 423743078070801 (local number Wo 2), located 25 ft (7.6 m) southeast, which has a period of record from November 1965 to May 1974 (unpublished).

PERIOD OF RECORD.--May 1974 to current year. Unpublished record for May 1974 to September 1976 is available in files of the Geological Survey.

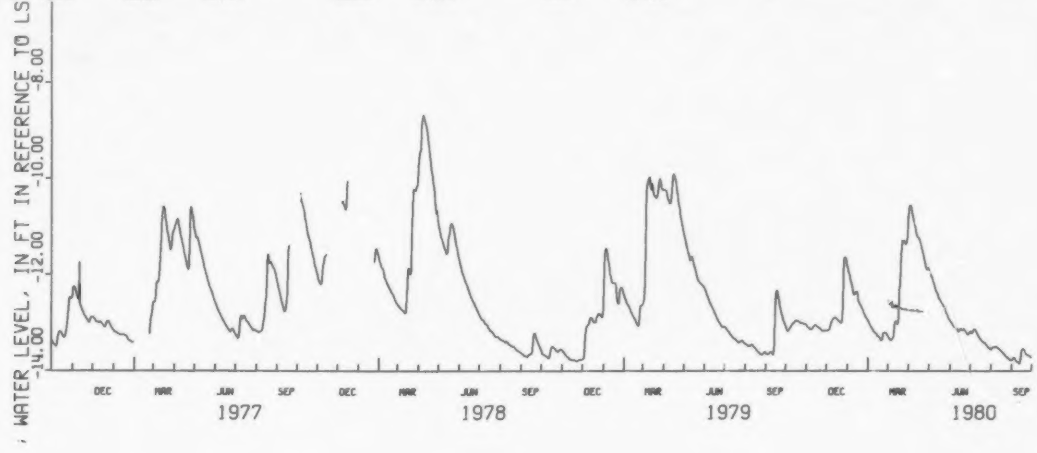
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.89 ft (2.40 m) below land-surface datum, Mar. 5, 1976; lowest, 14.00 ft (4.27 m) below land-surface datum, Nov. 3, 1974.

EXTREMES FOR CURRENT YEAR.--Highest water level, 10.55 ft (3.22 m) below land-surface datum, Apr. 24; lowest, 13.86 ft (4.22 m) below land-surface datum, Sept. 13, 14.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.08	13.05	13.16	11.83	12.95	13.26	10.67	11.88	12.95	13.18	13.56	13.79
2	13.11	13.07	13.16	11.89	12.99	13.30	10.56	11.92	12.97	13.17	13.56	13.78
3	13.15	13.09	13.16	11.96	13.02	13.32	10.55	11.96	12.99	13.18	13.52	13.72
4	13.18	13.11	13.16	12.00	13.06	13.34	10.56	12.00	13.01	13.21	13.50	13.71
5	13.19	13.11	13.16	12.06	13.07	13.36	10.61	12.04	13.03	13.22	13.50	13.72
6	13.15	13.13	13.12	12.12	13.09	13.36	10.70	12.08	13.05	13.16	13.51	13.75
7	13.12	13.14	13.06	12.19	13.12	13.35	10.77	12.13	13.09	13.12	13.51	13.78
8	13.10	13.14	13.00	12.25	13.15	13.35	10.86	12.18	13.10	13.12	13.49	13.80
9	13.08	13.14	12.96	12.33	13.17	13.31	10.91	12.23	13.10	13.14	13.49	13.81
10	13.05	13.13	12.93	12.38	13.19	13.28	10.97	12.27	13.10	13.17	13.51	13.82
11	13.02	13.09	12.92	12.42	13.20	13.05	11.05	12.31	13.11	13.20	13.53	13.83
12	13.01	13.07	12.90	12.43	13.21	12.97	11.13	12.36	13.13	13.23	13.52	13.84
13	13.01	13.05	12.89	12.39	13.23	12.96	11.19	12.38	13.16	13.26	13.53	13.85
14	12.99	13.05	12.89	12.35	13.25	12.97	11.23	12.40	13.18	13.28	13.55	13.75
15	12.97	13.05	12.89	12.35	13.27	13.01	11.22	12.46	13.19	13.30	13.56	13.61
16	12.95	13.06	12.91	12.36	13.29	13.04	11.24	12.49	13.13	13.33	13.58	13.55
17	12.95	13.07	12.93	12.48	13.29	12.90	11.28	12.52	13.12	13.35	13.59	13.54
18	12.95	13.09	12.95	12.58	13.31	12.32	11.32	12.54	13.12	13.37	13.60	13.54
19	12.96	13.10	12.96	12.60	13.34	12.14	11.37	12.57	13.14	13.38	13.62	13.54
20	12.97	13.11	12.98	12.62	13.36	11.87	11.42	12.59	13.16	13.39	13.64	13.57
21	12.98	13.12	12.98	12.64	13.38	11.57	11.49	12.60	13.13	13.41	13.65	13.60
22	13.00	13.12	13.00	12.67	13.37	11.32	11.55	12.63	13.12	13.42	13.67	13.63
23	13.00	13.14	13.02	12.70	13.24	11.28	11.59	12.66	13.13	13.41	13.69	13.66
24	13.01	13.16	12.99	12.74	13.20	11.30	11.66	12.69	13.16	13.43	13.70	13.66
25	13.01	13.17	12.70	12.77	13.20	11.29	11.73	12.73	13.19	13.45	13.72	13.67
26	13.01	13.18	11.99	12.80	13.20	11.31	11.80	12.76	13.21	13.47	13.72	13.68
27	13.02	13.18	11.68	12.83	13.20	11.36	11.87	12.80	13.23	13.49	13.73	13.68
28	13.03	13.17	11.63	12.86	13.21	11.38	11.91	12.82	13.25	13.51	13.75	13.69
29	13.03	13.17	11.63	12.89	13.23	11.33	11.87	12.86	13.25	13.52	13.76	13.71
30	13.03	13.16	11.68	12.92	---	11.18	11.86	12.89	13.21	13.53	13.77	13.72
31	13.03	---	11.75	12.93	---	10.98	---	12.92	---	13.54	13.78	---
MEAN	13.04	13.11	12.75	12.46	13.20	12.41	11.23	12.44	13.12	13.32	13.61	13.70
HIGH	12.95	13.05	11.63	11.83	12.95	10.98	10.55	11.88	12.95	13.12	13.49	13.54
LOW	13.19	13.18	13.16	12.93	13.38	13.36	11.91	12.92	13.25	13.54	13.78	13.85

CAL YR 1979	MEAN	11.64	HIGH	9.90	LOW	13.68
WTR YR 1980	MEAN	12.87	HIGH	10.55	LOW	13.85



01527050 SWITZER CREEK NEAR COHOCTON, NY--Continued

SUSPENDED-SEDIMENT, PERIOD NOVEMBER 1978 TO SEPTEMBER 1979

DAY	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	0	.00	356	29	1	.01	10	.07
2			---	---	1	.00	630	56	3	.03	2	.02
3			---	---	5	.01	27	1.6	6	.06	4	.05
4			---	---	17	.09	16	.56	2	.02	31	2.4
5			---	---	6	.04	18	.44	1	.01	1120	290
6			---	---	1	.01	10	.17	5	.04	165	23
7			---	---	0	.00	7	.10	13	.09	91	8.4
8			---	---	1	.01	4	.06	4	.02	48	3.4
9			---	---	2	.02	6	.08	3	.02	23	1.2
10			---	---	0	.00	4	.05	1	.01	19	1.1
11			---	---	1	.01	2	.02	0	.00	11	.56
12			---	---	4	.03	4	.04	0	.00	12	.45
13			---	---	2	.01	3	.03	1	.00	18	.58
14			---	---	2	.01	1	.01	2	.01	96	6.5
15			---	---	0	.00	0	.00	1	.00	16	.78
16			---	---	0	.00	0	.00	0	.00	13	.46
17			---	---	0	.00	0	.00	3	.01	13	.39
18			---	---	0	.00	0	.00	1	.00	10	.30
19			---	---	1	.00	0	.00	0	.00	8	.26
20			1	.00	3	.01	0	.00	0	.00	9	.32
21			0	.00	4	.02	0	.00	1	.00	12	.52
22			2	.00	1	.01	2	.02	1	.00	23	1.1
23			10	.02	0	.00	1	.01	1	.00	75	5.5
24			6	.02	0	.00	13	.41	1	.01	180	21
25			1	.00	1	.00	66	4.3	1	.01	56	5.8
26			3	.01	15	.08	9	.10	2	.01	17	.83
27			1	.00	0	.00	4	2.4	4	.02	6	.19
28			0	.00	0	.00	2	.04	18	.11	8	.21
29			0	.00	0	.00	1	.02	---	---	8	.20
30			0	.00	0	.00	0	.00	---	---	31	.92
31			---	---	2	.01	1	.01	---	---	72	2.5
TOTAL			---	0.05	---	0.37	---	95.47	---	0.49	---	379.01

DAY	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	32	.86	3	.02	4	.02	6	.02	9	.04	3	.00
2	14	.42	4	.03	5	.03	3	.01	8	.03	9	.02
3	7	.18	3	.02	6	.03	3	.01	6	.02	8	.02
4	6	.15	4	.03	4	.02	3	.01	4	.01	3	.00
5	7	.18	3	.02	4	.02	2	.00	3	.01	2	.00
6	5	.11	3	.02	5	.02	1	.00	2	.00	160	3.5
7	4	.08	3	.02	5	.02	2	.00	4	.01	20	.11
8	6	.12	4	.02	5	.02	2	.00	5	.01	6	.03
9	16	.43	5	.03	5	.02	2	.00	6	.01	5	.02
10	14	.38	7	.04	3	.01	2	.00	2	.00	3	.01
11	19	.62	7	.04	5	.02	3	.01	3	.00	2	.01
12	8	.30	7	.04	1	.00	4	.01	5	.01	1	.00
13	8	.32	8	.04	2	.01	2	.00	4	.00	2	.00
14	8	.32	5	.03	0	.00	2	.00	3	.00	500	23
15	9	.32	5	.02	1	.00	7	.02	3	.00	21	.28
16	6	.18	5	.02	3	.01	7	.03	2	.00	9	.08
17	5	.13	4	.02	1	.00	4	.01	3	.00	12	.08
18	5	.11	5	.02	2	.00	4	.01	4	.01	6	.04
19	5	.10	5	.02	2	.00	2	.00	2	.00	7	.04
20	5	.09	5	.02	1	.00	3	.01	1	.00	4	.02
21	3	.05	3	.01	2	.00	2	.00	4	.00	3	.01
22	5	.07	4	.02	6	.02	2	.00	6	.01	3	.01
23	7	.09	4	.02	4	.01	9	.24	5	.01	3	.01
24	5	.06	8	.04	1	.00	11	.04	8	.01	1	.00
25	6	.07	12	.06	1	.00	10	.03	6	.01	3	.01
26	6	.06	6	.03	2	.00	8	.02	2	.00	5	.01
27	6	.07	4	.02	4	.01	6	.01	12	.04	2	.00
28	5	.05	4	.02	8	.03	6	.01	7	.01	4	.01
29	5	.04	4	.02	8	.03	5	.01	3	.00	5	.02
30	3	.03	5	.03	8	.03	4	.01	2	.00	2	.01
31	---	---	3	.02	---	---	11	.06	1	.00	---	---
TOTAL	---	5.99	---	0.81	---	0.38	---	0.58	---	0.25	---	27.35

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October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	$2.54\mathrm{x}10^{1}$	millimeters (mm)
	$2.54\mathrm{x}10^{-2}$	meters (m)
feet (ft)	$3.048\mathrm{x}10^{-1}$	meters (m)
miles (mi)	$1.609\mathrm{x}10^{0}$	kilometers (km)
	Area	
acres	$4.047\mathrm{x}10^{3}$	square meters (m^{2})
	$4.047\mathrm{x}10^{-1}$	square hectometers (hm^{2})
	$4.047\mathrm{x}10^{-3}$	square kilometers (km^{2})
square miles (mi^{2})	$2.590\mathrm{x}10^{0}$	square kilometers (km^{2})
	Volume	
gallons (gal)	$3.785\mathrm{x}10^{0}$	liters (L)
	$3.785\mathrm{x}10^{0}$	cubic decimeters (dm^{3})
	$3.785\mathrm{x}10^{-3}$	cubic meters (m^{3})
million gallons	$3.785\mathrm{x}10^{3}$	cubic meters (m^{3})
	$3.785\mathrm{x}10^{-3}$	cubic hectometers (hm^{3})
cubic feet (ft^{3})	$2.832\mathrm{x}10^{1}$	cubic decimeters (dm^{3})
	$2.832\mathrm{x}10^{-2}$	cubic meters (m^{3})
cfs-days	$2.447\mathrm{x}10^{3}$	cubic meters (m^{3})
	$2.447\mathrm{x}10^{-3}$	cubic hectometers (hm^{3})
acre-feet (acre-ft)	$1.233\mathrm{x}10^{3}$	cubic meters (m^{3})
	$1.233\mathrm{x}10^{-3}$	cubic hectometers (hm^{3})
	$1.233\mathrm{x}10^{-6}$	cubic kilometers (km^{3})
	Flow	
cubic feet per second (ft^{3}/s)	$2.832\mathrm{x}10^{1}$	liters per second (L/s)
	$2.832\mathrm{x}10^{1}$	cubic decimeters per second (dm^{3}/s)
	$2.832\mathrm{x}10^{-2}$	cubic meters per second (m^{3}/s)
gallons per minute (gal/min)	$6.309\mathrm{x}10^{-2}$	liters per second (L/s)
	$6.309\mathrm{x}10^{-2}$	cubic decimeters per second (dm^{3}/s)
	$6.309\mathrm{x}10^{-5}$	cubic meters per second (m^{3}/s)
million gallons per day	$4.381\mathrm{x}10^{1}$	cubic decimeters per second (dm^{3}/s)
	$4.381\mathrm{x}10^{-2}$	cubic meters per second (m^{3}/s)
	Mass	
tons (short)	$9.072\mathrm{x}10^{-1}$	megagrams (Mg) or metric tons